

STRESS AND ROLE SATISFACTION:
THE MEDIATING EFFECTS OF SOCIAL SUPPORT, HARDINESS, COPING
STRATEGIES, AND GENDER IN ACADEMIC MULTIPLE ROLE PERSONS

By

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STRESS AND ROLE SATISFACTION:
THE MEDIATING EFFECTS OF SOCIAL SUPPORT, HARDINESS, COPING
STRATEGIES, AND GENDER IN ACADEMIC MULTIPLE ROLE PERSONS

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Individuals involved in multiple life roles comprise a large segment of our society, yet little is known about how stressful and satisfying they find this lifestyle, or about what characteristics are related to feeling stressed or satisfied. The purpose of this study was to examine role and life satisfaction and stress in men and women involved in multiple roles and to explore the mediating effects of coping strategies, hardiness, social support, and gender on these levels of stress and satisfaction.

The sample included 102 males and 111 females involved in multiple role lifestyles, randomly selected from lists of faculty, research scientists, and administrators at a large southwestern university. Multiple role membership was defined as having a career, being married and living with one's spouse, and having at least one child living at home. Participants completed questionnaires assessing their levels

of stress; general life satisfaction; career, marital, parental, and leisure role satisfaction; hardiness; social support; and coping strategies.

The participants reported relatively low levels of stress, moderately high levels of all forms of satisfaction, moderate hardiness, high perceived social support from their families, moderate social support from their friends, and a tendency to use active-cognitive and active-behavioral coping strategies and not avoidance coping strategies. The men in the sample reported significantly lower levels of stress ($p < .05$) and higher levels of career satisfaction ($p < .05$) and leisure satisfaction ($p < .05$) than women. Women indicated significantly higher levels of perceived social support from their friends ($p < .05$) and used a higher percentage of avoidance coping strategies than men ($p < .05$).

Regression analyses were conducted to examine the relationship between stress and satisfaction levels and hardiness, social support, and coping strategies. The various forms of satisfaction were significantly predicted by hardiness, social support, and coping strategies ($p < .05$). Significant predictors were different for males and females, indicating gender is also an important variable. Stress was significantly related to hardiness and avoidance coping strategies for men ($r^2 = .25$, $p < .0001$) and for women ($r^2 = .11$, $p < .001$).

Implications for an interactional theory of stress, for counseling, and for further research were discussed.

CHAPTER I

INTRODUCTION

Since the industrial revolution, men and women have devoted the major focus of their lives to one role. For men, it was the breadwinning role, and for women, it was the family role. Recently, however, both men and women are becoming involved in many different roles simultaneously. Many individuals of both sexes now have demanding careers as well as involved home lives with spouses and children. Historically, career and family involvement have never been easily combined in the same person (Hunt & Hunt, 1982). However, these people who are involved in multiple life roles attempt to do it all. How do they do it? What are the consequences of this unique lifestyle?

Sociologists (e.g., Sieber, 1974) have noted that individuals in this society have been working towards, even demanding, the right to participate in multiple life roles. American women are a prime example of this trend toward increased involvement in multiple roles. Traditionally, women have focused on the parental and spousal roles and did not occupy roles in the working world. However, in 1986, the United States Bureau of the Census (1986) reported that 54.6% of all married women were in the

work force. By 1990, it is expected that 75% of all married women will be in the work force (Catalyst, 1981). Men are also becoming involved in more roles. Although men have traditionally specialized in the external family breadwinner role (Pleck, 1979), they recently have been becoming increasingly involved in the parental role, taking on more responsibility for infant and child care (Parke, 1981).

With so many people occupying multiple life roles, and even more being expected to do so in the future, some sociologists have wondered about the effects of multiple role involvement on the individual. A role is defined as a pattern of expectations which apply to a particular social position and which normally persist independently of the person occupying the position (Gross, Mason, & McEachern, 1958). Examples of life roles include child, sibling, friend, worker, spouse, and parent. Multiple roles are combinations of roles occupied at the same time. Theoretical statements have been written by sociologists proposing both detrimental effects (e.g., Goode, 1960) and rewarding effects (e.g., Sieber, 1974) of being involved in multiple roles.

The earliest theories on the effects of the multiple role lifestyle on the individual focused on the possible detrimental effects. Goode (1960) was one of the earliest sociologists to point out that occupying multiple roles could be detrimental, causing role strain. He argued that although it is generally expected by society that

individuals will be able to fulfill their role obligations, different roles may have somewhat different obligations. There may be contradictory performances required, or there may be conflicts in time, place, or resources. Goode proposed two forms of role strain. First, there may be role overload, which refers to constraints imposed by time. As role obligations increase, sooner or later a time barrier is confronted that forces the person to honor some roles at the expense of honoring others. Second, the individual may experience role conflict, or discrepant expectations. On occasion, the person must choose between the expectations of two different roles because compliance with the expectations of one will violate the expectations of the other. Goode believed that the individual would not be able to meet all of the demands. In other words, the individual's total role obligations could be overdemanding, causing role strain. As the individual adds more roles, role strain increases. The addition of each new role increases the probability of running out of time and of confronting role partners whose expectations are contradictory.

This theory can be expanded to cover the literature on stress among academic multiple role persons. According to Seldin (1987), the career role itself among faculty members requires too much work with too little time. On top of this, according to Sorcinelli and Gregory (1987), the principal source of stress in faculty lives involves the problem of adjusting professional work and personal living

so that neither is slighted and both are fulfilled. Thus, role overload and role conflict are likely among academic multiple role persons.

Other sociologists, however, have seen multiple roles as having distinct benefits to the person. Sieber (1974) has argued that being involved in numerous roles, called role accumulation, has many rewards. These rewards include rights and privileges that come with the role, resources for status enhancement and role performance, status security, and personality enrichment and ego gratification.

Role privileges include inherent rights built into the role that serve as inducements for recruitment and continuance of role performance. For example, work roles often include opportunities for promotions, status, and a sense of doing something important. Roles also offer non-institutionalized, unofficial privileges and resources which the individual may use to continue role performance, or to enhance his or her status. Examples of these include recommendations or introductions to third parties who might advance one's career or other interests and the use of company property for personal reasons. Role accumulation also provides status security. According to Sieber (1974), an individual with a wide array of role partners is able to compensate for failure in any particular social sphere or relationship by falling back on other relationships which may provide compensating affection, moral support, emergency resources, and sometimes assistance for a renewal of effort

in the original role. Roles also offer personality enrichment and ego gratification. A sense of being needed or appreciated by many, tolerance of discrepant viewpoints, exposure to many sources of information, flexibility in adjusting to the demands of diverse role partners, and reduction in boredom may accrue to the person who enjoys wide and varied contacts with others. Roles also give purpose, meaning, direction, and guidance to one's life (Thoits, 1983). Thus, the more roles one occupies, the more formal and informal privileges one has available, the more security one has should any one role be removed, and the stronger one's sense of meaningful, guided existence.

Given the seemingly contradictory nature of the theories presented about the effects of multiple role involvement on the individual, empirical validation is needed to help determine the impact of a multiple role lifestyle. Unfortunately, such literature is scarce. A few researchers have looked at whether the presence or absence of a specific role has any implications for mental health. Evidence provided by the researchers of the incidence and prevalence of mental illness shows that those who hold few social identities, such as people who are unmarried, unemployed, retired, housewives, and those who live alone, have a greater risk of psychological disturbance than their more integrated counterparts (Bradburn, 1969; Gove, 1972; Gove & Hughes, 1980; Gove & Tudor, 1973; Gurin, Veroff, & Feld, 1960; Radloff, 1975). Other studies of

major life events (which usually involve losses or gains of important social positions) show similar results (Thoits, 1983). The death of a spouse (e.g., Clayton, Halikas, & Maurice, 1972) and significant role losses (Bart, 1974; Glassner, Haldipur, & Dessauersmith, 1979) have proved more common in the lives of psychiatric patients prior to onset of illness compared to controls. Thus, these studies tend to indicate that involvement in roles is not detrimental to the individual's mental health. However, they do not address whether multiple role involvement is detrimental; they focus on only one role at a time.

Only one group of researchers has looked directly at the relationship between the number of roles enacted and well-being. Spreitzer, Snyder, and Larson (1979) used data from the Annual General Social Survey to test the relationship between number of roles and well-being. Psychological well-being was operationalized as the response to the question, "Taken all together, how would you say things are these days? Would you say that you are very happy, pretty happy, or not too happy?" Five role spheres were used in the analysis: spouse, parent, worker, friend, and church member. The authors reported a modest, positive linear relationship between number of roles played and psychological well-being among both men and women. Thirty-three percent of men and 37% of women who occupied only the work role reported a high degree of happiness, whereas 45% of men and 46% of women who occupied all five

roles indicated a high degree of satisfaction. This study is limited because no attempts were made to assess the statistical significance of these results. Furthermore, the worker role was the only role to be considered alone (i.e., only those who said they were only workers were included in the 'one role' category), thus limiting the generalizability to the people who are spouse-only, and so forth. Finally, no analyses were done on the people who were moderately happy or not too happy.

Thus, the empirical evidence seems to provide some support for the theory that multiple role involvement has benefits in terms of mental health and well-being. However, the research is scant and inconclusive. Further, many of the studies have focused only on women or men, have considered only one role at a time, and have included only indices of mental health or indices of well-being. Finally, no studies have focused on academic multiple role persons. In sum, no one study has adequately assessed the levels of strain and satisfaction that academic multiple role men and women experience.

Statement of the Problem

The evidence on the effects of occupying multiple roles on either the individual's level of stress or satisfaction is scarce and seems to be comprised mostly of studies that compare those people who hold a particular role to those who do not hold that role on indices of mental health. With the theories of Goode (1960) and Sieber (1974) differing as to

the expected effects of this lifestyle, and incomplete empirical evidence, it is advantageous to try to place the question of how multiple role involvement affects the individual into a larger theoretical framework. The theoretical models of Goode (1960) and Sieber (1974) both imply that the multiple role lifestyle may have consequences for the well-being of the individual. Thus, a framework that links life circumstances to outcomes such as strain and satisfaction would be helpful. One such framework is the interactional model of stress as proposed by Lazarus and Folkman (1984).

Briefly, Lazarus and Folkman (1984) proposed a cognitive theory of psychological stress in which the person and the environment are viewed as being dynamic and mutually reciprocal. Stress is conceptualized as a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and as endangering well-being. The authors identify two processes, cognitive appraisal and use of coping strategies, as critical mediators of stressful person-environment relationships and their immediate and long-term outcomes. Cognitive appraisal is the process through which the person evaluates whether a particular encounter with the environment is relevant to his or her well-being and, if so, in what way. Lazarus and Folkman proposed two kinds of appraisal: primary and secondary. Primary appraisal involves the individual's determination of the situation as

positive, irrelevant, or stressful. During this process the individual appraises the level of demand of the situation (Cox, 1978). Thus, demand is based on the person's perception of the environment. Demand may be external, coming from the environment (such as a work deadline), or internal, including psychological and physiological needs and expectations, such as the expectation that one can do everything well. In secondary appraisal, the individual assesses the resources available and what can be done about the situation.

Numerous factors influence the appraisal process, including factors relating to the situation, to the person, and to the coping strategies available (Lazarus & Folkman, 1984). Factors relating to the situation that affect appraisal include its novelty, predictability, timing, and ambiguity. Factors relating to the person, such as his or her beliefs about personal control and expectations of efficacy and outcome, affect the appraisal process. Factors relating to coping strategies available to the person include problem solving skills, social skills, social support, and material resources. These factors all interact to influence how the individual appraises the situation and his or her ability to deal with it. The person's appraisal then influences the coping strategies that are tried. The individual continually reappraises the situation and possibilities as new information from the environment and from the person's own reactions are received. How the

person copes is proposed to have short-term and long-term consequences in terms of social functioning, morale and well-being, and somatic health.

The multiple role lifestyle, as it has been theorized by Sieber (1974) and Goode (1960), can easily be fit into this model. Involvement in multiple roles may be appraised by the person as stressful, benign, or positive. Sieber's (1974) ideas on the rewards of multiple role involvement assume that the individual appraises the lifestyle as positive and describes the possible consequences of the lifestyle in terms of well-being. Goode (1960) proposed role overload and role conflict as two major stressful consequences felt by these people. Role overload may be conceptualized as stemming from external demands. When the person is involved in many roles, with each role demanding a portion of the person's time, there may be a point at which the person perceives these external demands as beyond what he or she can handle and experiences role overload. Similarly, role conflict may be thought of as coming from either internal demands or external demands. Role conflict occurs when there are discrepant expectations. These expectations may be held by others, and thus would be external, or could be held by the person, making them internal. An example of the latter might be the conflicting expectations of a working mother that she can have a successful career which requires working 40 hours per week but that she must not give her children any less attention

than if she did not work. Thus, this woman is making demands on herself that she may perceive as stressful and may result in feelings of role conflict.

The interactional model (Lazarus & Folkman, 1984) has been empirically researched in a limited manner. Several of the factors included in the model have been studied individually to determine their singular effects on outcomes such as stress and mental health. Coping strategies, personality factors such as hardiness, and social support, each, when studied individually, have been related empirically to better mental health. However, none of the samples used by these studies have been identified as multiple role persons.

In the interactional model, the use of coping strategies is one of the two critical mediators of stressful person-environment relationships and their outcomes. There is a growing consensus that coping strategies play a central role in the effectiveness of an individual's response to stressors. For example, Billings and Moos (1981) found that indices of coping strategies moderated the relationship between negative life events and indicators of psychological and physical distress. Goode (1960) also theorized that multiple role individuals must use some mechanisms for reducing strain. Thus, knowing what strategies are used and measuring how they affect multiple role individual's levels of stress and satisfaction seems to be considered important in both the interactional model and in theories about multiple role persons.

In this model, a number of factors influence the coping strategies available to the person. One factor is social support. The concept of social support has received much attention in the social, behavioral and medical literature in the past decade (see Bruhn & Philips, 1984 for a review). The loss or absence of familiar sources of social support has been linked to coronary heart disease, suicides, mental hospital commitment, ulcers, cancer, schizophrenia, and longevity (Bruhn & Philips, 1984). However, exactly how social support is related to adaptation is still the subject of investigation. Because multiple role persons are involved in many roles in which they interact with others, the questions of whether they receive social support from these significant others and how that support affects their levels of stress and satisfaction are important to consider.

In the interactional model, the appraisal process also is thought to be influenced by many factors. One such factor is the personality of the individual. Kobasa and her colleagues (Kobasa, 1979, 1982; Kobasa, Maddi, & Puccetti, 1982; Maddi, Kobasa, & Hoover, 1979) have investigated the importance of personality as a conditioner of the illness-provoking effects of stress. They have formulated the concept of hardiness. Hardy people are considered to possess three general characteristics: (a) the belief that they can control or influence the events of their experience, (b) an ability to feel deeply involved in or committed to the activities of their lives, and (c) the

anticipation of change as an exciting challenge to further development. Kobasa (1979) found that executives who experienced high stress but low illness had significantly higher hardiness scores than executives who experienced high stress and high illness. Although Kobasa did not use multiple role involvement as a criterion for inclusion in her study, many of the executives she surveyed were probably involved in multiple roles, and thus her findings may also apply to multiple role persons. That is, the hardy personality may act as a mediator in the stress-outcome process for multiple role persons.

One final variable that is not included in the Lazarus and Folkman (1984) model but that has been suggested in other literature as important when studying multiple role persons is gender. Recent attention has been given to the possible differences between men and women in terms of the effects of multiple role involvement. According to Barnett and Baruch (1985), women occupy roles that are different from those of men, such as wife and mother, and roles that are labeled identically but may be structured differently, such as work. Involvement in both work and family roles is seen as the norm for men and a source of overload and conflict for women. Thus, gender seems to be an important variable that may be related to how multiple role individuals experience their lifestyles in terms of stress and satisfaction.

In summary, little empirical evidence is available on the effects of occupying multiple roles on the individual's levels of stress and satisfaction. The interaction model of stress as proposed by Lazarus and Folkman (1984) provides a framework for understanding how the multiple role lifestyle may have consequences for the individual's well-being. The authors suggest that the mediators of coping strategies, hardiness, and social support may also affect the individual's well-being. Gender may also be an important variable. Past researchers of these mediators have not addressed themselves to multiple role individuals. Thus, research is needed to describe the levels of stress and satisfaction experienced by multiple role persons, and to determine how these mediators affect the levels of stress and satisfaction in this population.

Purpose of the Study

The purpose of this study was twofold. First, role and life stress and satisfaction in men and women involved in multiple life roles were examined. Second, using an interactional stress model, the mediating effects of coping strategies, hardiness, social support, and gender on role and life stress and satisfaction were explored.

Research Questions

In this study, the levels of stress and satisfaction experienced by multiple role persons and the relationship between these levels of stress and satisfaction and the mediating variables of coping strategies used, hardiness,

social support, and gender were described. The specific research questions were

1. How can multiple role persons be described in terms of
 - a. the level of stress they experience?
 - b. the amount of career, spousal, parental, leisure, and general life satisfaction they experience?
 - c. their hardiness?
 - d. their typical coping strategies?
 - e. their level of social support?
2. Do male and female multiple role persons differ regarding
 - a. the level of stress they experience?
 - b. the amount of career, spousal, parental, leisure, and general life satisfaction they experience?
 - c. their hardiness?
 - d. their typical coping strategies?
 - e. their level of social support?
3. How do gender, hardiness, social support, and typical coping strategies relate to the levels of career satisfaction, marital satisfaction, parental satisfaction, leisure satisfaction, and life satisfaction of multiple role persons?
4. How do gender, hardiness, social support, and typical coping strategies relate to the level of stress in multiple role persons?

Importance of the Study

Although the exact number of multiple role persons is not known, data from the U.S. Bureau of the Census (1986) indicate that many people fit into this category. In 1986, the percent of married men between the ages of 16 and 64 who were in the workforce ranged from 81.8 to 97.3, depending on age. Fifty-five percent of married women over 15 (over 30 million women) participated in the labor force. Furthermore, 68.4% of married women with children between the ages of 6 and 17, and 53.8% of married women with children under 6 were in the labor force. This totals 14.4 million married women in the workforce with children under the age of 18. Thus, multiple role individuals comprise a large segment of society, yet little is known about them. Theories, such as that espoused by Goode (1960), predict that these people experience high levels of stress, both in terms of role conflict and role overload. Other theories (e.g., Sieber, 1974) focus on the positive consequences of being involved in multiple roles. However, very little empirical research has been done to validate these theories. More research is needed to explore this large and growing segment of our society. This study was designed to do that.

Information about multiple role persons has implications in a number of areas. First, it has implications for further research. Second, it may give mental health practitioners information they may apply to better assist these people. Finally, it has implications for the further use of the interactional model of stress.

The results of this study will help guide further research on multiple role individuals. In this study, information is provided on the levels of stress and satisfaction experienced by these people and to what extent coping strategies, hardiness, social support, and gender affect stress and satisfaction. Researchers may use this information to increase the general knowledge available on multiple role individuals, to help provide a focus for more in-depth studies, and to aid in speculating about other areas that may be important to investigate.

Second, this study has implications for mental health practitioners. If multiple role individuals experience high levels of stress or low levels of satisfaction, some of them are likely to seek the help of counselors. Knowledge about the levels of stress and satisfaction experienced by these people will help counselors to better understand them and the issues that are most salient. Furthermore, knowledge about mediators such as coping strategies, social support, and personality style will give the counselor guidelines for how to help the multiple role client. For example, the counselor may teach the multiple role client coping strategies that have been found to be related to low stress and/or high satisfaction. The counselor could help the client to develop a more hardy personality by helping the client restructure how he or she perceives the world (e.g., as challenging rather than threatening), to invest more personal commitment in the roles he or she occupies, and to

feel more in control of his or her life. Finally, the counselor might help the multiple role client develop a better social support system.

Finally, this study has implications for the use of an established interactional model of stress as a framework for viewing how the multiple role lifestyle affects the individual and for highlighting other possible important mediators of the stress-outcome relationship. The authors of the model propose that situations appraised as stressful may have consequences for the individual's well-being, and that this link is mediated by factors such as coping strategies used, hardiness, and social support. In this study, evidence is provided that may be used to evaluate the theoretical link between lifestyle, mediators of stress, and consequences for the well-being of the multiple role individual. The results of this study have implications for the usefulness of this framework with multiple role individuals.

Definition of Terms

A number of terms will be used throughout this dissertation, and thus deserve further elaboration and definition.

Career: A job sequence that requires a high degree of commitment (time, energy and training); is highly salient personally (substantial ego involvement); and has a continuous developmental quality (advances in responsibility, pay, power, and status) (Rapoport & Rapoport, 1969).

Coping strategy: The cognitive and behavioral reactions that are performed to reduce or eliminate psychological distress or stressful conditions (Billings & Moos, 1981).

Hardiness: A personality dimension defined by three general characteristics: (a) a belief that one can control or influence the events of one's experience, (b) an ability to feel deeply involved in or committed to the activities of one's life, and (c) the anticipation of change as an exciting challenge to further development (Kobasa, 1979).

Married: Legally married in the state of residence and currently living with one's spouse.

Multiple role persons: Persons who simultaneously engage in the roles of career-holder, spouse, and parent.

Parent: An individual who has at least one child who lives in his or her home.

Role: A pattern of expectations which applies to a particular social position and which normally persists independently of the person occupying the position (Gross, Mason, & McEachern, 1958; Merton, 1957).

Satisfaction: The affective orientation on the part of an individual toward a role he or she is presently occupying (Vroom, 1964).

Career satisfaction: An individual's attitude toward one's present career, essentially comprised of feelings of being actualized (having a good fit between career and ability and interests) and feelings of being successful (Osherson & Dill, 1983).

Leisure satisfaction: The positive perceptions or feelings which an individual forms, elicits, or gains as a result of engaging in leisure activities and choices. It is the degree to which one is presently content or pleased with one's general leisure experiences and situations (Beard & Ragheb, 1980).

Life satisfaction: An individual's assessment of the nature and quality of his or her life experience as a whole, as viewed at the present time, and as measured by the Index of Well-Being (Campbell, Converse, & Rodgers, 1976).

Marital satisfaction: An attitude of greater or lesser favorability toward one's own marital relationship (Roach, Frazier, & Bowden, 1981).

Parental satisfaction: The positive feeling an individual has about his or her children's behavior toward the parent and the parent's behavior toward the children (Marini, 1980).

Social support: The extent to which an individual believes that his or her needs for support, information, and feedback are fulfilled (Procidano & Heller, 1983).

Stress: Although the term stress has been used in the literature to mean a variety of things, including a noxious stimulus, a particular response to the environment, and the relationship between the person and the environment, in this study stress is defined as a syndrome of physical, behavioral, and cognitive symptoms that are elicited, to varying degrees, by environmental demands upon the individual (Lefebvre & Sandford, 1985).

Organization of the Study

The remainder of this study is presented in four chapters. In Chapter II, the related literature is reviewed and analyzed. In Chapter III, the methodology of the study is presented, including a description of the population and sample, the sampling procedure, the instruments, the data collection procedures, and the data analyses. In Chapter IV, the results of the study are presented. Finally, in the last chapter, V, a discussion and interpretation of the results, the limitations of the study, and recommendations are provided.

CHAPTER II

REVIEW OF THE LITERATURE

In this chapter, a review and synthesis of the literature relevant to the areas of multiple roles, stress, satisfaction, gender differences, and the mediating factors of hardiness, social support, and coping strategies are presented.

Multiple Roles

The area of multiple role involvement has been the focus of a limited amount of theory and research. Sociology provides the majority of the literature available in both theory and research. Within that literature, there are seemingly contradictory theories and conflicting data addressing the effects of multiple role involvement on the individual.

Theoretical Literature on Multiple Roles

The effects of multiple roles on the individual has been the topic of some theoretical discussion. In general, there are two opposing viewpoints on how multiple role involvement affects the person. The first viewpoint, represented by Goode (1960), asserts that multiple role involvement has detrimental effects on the individual such as role overload and role conflict. The opposing viewpoint,

represented by Marks (1977), Sieber (1974), and Thoits (1983) states that multiple role involvement does not necessarily have negative effects and that it may have positive effects such as extra rights and privileges, status security, personal enrichment, and psychological well-being.

One major hypothesis about the relationship of role occupancy to stress is the scarcity hypothesis (Marks, 1977). As described by Goode (1960), this formulation rests on two premises: (a) that individuals have a limited amount of energy, and (b) that social organizations are greedy, demanding all of an individual's allegiance and energy. The multiple role individual is likely to face a wide, and sometimes conflicting, array of role obligations. These obligations may all be part of one role, such as a minister who must be the inspirational spiritual leader of the community as well as the neutral counselor, or they may come from many different roles. Because individuals only have a limited amount of energy, they often do not have enough to fulfill all of their role obligations. If the individual fills his or her obligations fully in one role, fulfillment may be difficult in another role, causing role strain.

Role strain comprises two overlapping problems: role overload and role conflict. The former refers to constraints imposed by time. As role obligations increase, sooner or later a time barrier is confronted that forces the individual to honor some role obligations at the expense of honoring others. The latter, role conflict, refers to

discrepant expectations irrespective of time pressures. On occasion, the individual must choose between the expectations of two different role obligations because compliance with the expectations of one would violate the expectations of the other. The more roles one accumulates, the greater the probability of exhausting one's supply of time and energy, and of confronting conflicting obligations, leading to role strain and psychological distress.

Other theorists, such as Marks (1977), Sieber (1974), and Thoits (1983), have questioned the assumption that human energy is limited or "scarce" and that multiple role involvement leads only to role strain. Marks (1977) described an alternative approach to human energy. Noting that all multiple role persons do not appear to be struggling with role conflicts or suffering from role overload, he questioned the scarcity of energy and, instead, described an alternative approach wherein involvement in roles does not necessarily use up energy. Instead, it may actually create energy for use in that role or in other roles. According to Marks (1977), people seem to find the time and energy for anything they are highly committed to and often feel more energetic after having done it. Thus, the human resources of time and energy are flexible, and, because of that, multiple role involvement need not result in role strain.

Sieber (1974) went even further, arguing that being involved in numerous roles (role accumulation) has many

rewards. These rewards include rights and privileges that come with the role, resources for status enhancement and role performance, personality enrichment and ego gratification, and status security.

Role privileges include inherent rights that are built into the role that serve as inducements for recruitment and continuance of role performance. For example, work roles often include vacation time, access to low cost insurance, opportunities for promotions, status, and a sense of doing something important. The more roles one occupies, the more privileges one has available (Sieber, 1974).

Roles also offer non-institutionalized, unofficial privileges and resources which the individual may use to continue role performance, or to enhance his or her status (Sieber, 1974). Examples of these include recommendations or introductions to third parties who might advance one's career or other interests; free gifts, meals, clothing, or shelter; and the use of company property for personal reasons. More roles translates into more such privileges and resources.

Roles also offer personality enrichment and ego gratification. A sense of being needed or appreciated by many, tolerance of discrepant viewpoints, exposure to many sources of information, flexibility in adjusting to the demands of diverse role partners, and reduction in boredom may accrue to the person who enjoys wide and varied contacts with others.

Finally, role accumulation provides status security. According to Sieber (1974), an individual with a wide array of roles is able to compensate for failure in any particular social sphere or relationship by falling back on other relationships. The classic example of this is the man who throws himself into his work when he feels that his marriage is turning for the worse. These alternative relationships afford compensating affection, moral support, emergency resources, and sometimes assistance for a renewal of effort in the original role. As the number of roles increases, the more security one has should any one role be removed.

Similar to Sieber (1974), Thoits (1983) asserted that people get a sense of identity from their roles. Role requirements give purpose, meaning, direction, and guidance to one's life. This sense of meaningful existence and purposeful, ordered behavior are crucial to psychological health. Furthermore, roles produce ego-gratification, or the sense of being appreciated or needed by others. A lack of roles in people's lives leaves them without a sense of who they are or how to behave. They may experience anxiety, depression, or even severely disorganized behavior (Rose, 1962).

In reviewing the theories on the effects of multiple role involvement on the individual, it is apparent that there is little consensus. One position holds that multiple role involvement leads to role overload and role conflict, whereas another position holds that there need not be any

detrimental effects, and, in fact, there may be the positive effects of increased rights, privileges, resources, status security, ego gratification, and psychological well-being.

Literature on Academic Multiple Roles

This study focuses on a subset of all people involved in multiple roles: those whose careers are in academia. Surprisingly little has been written on the theoretical or actual effects of multiple role involvement in academic multiple role persons. The work that has been done has focused on the stresses experienced by those on academia. Stresses have been found both within the career itself and in trying to balance the career role with other roles.

Seldin (1987), only focusing on the career role, identified several sources of stress for faculty members. These included inadequate participation in institutional planning and governance, too many tasks with too little time to complete them, low pay and poor working conditions, inadequate faculty recognition and reward, unrealized career expectations and goals, and unsatisfactory interactions with students, colleagues, and department chairs. Seldin (1987) concluded that academic stress is a national phenomenon, citing studies that indicate that as many as 62% of faculty acknowledge moderate to severe job stress (e.g., Melendez & de Guzman, 1983).

According to Sorcinelli and Gregory (1987), the principal source of stress in faculty lives involves the problem of adjusting professional work and personal living

so that neither is slighted and both are fulfilled. According to these authors, careers in academia tend to become a way of life and even the person's whole life. These careers require years of training and demand a high and even absorbing level of commitment. Faculty members are asked to do many different tasks, more than enough to fill one's entire life, and success is always measured against time. There is an unprecedented imperative to produce and to publish more, earlier, and faster, plus teaching, advising, disciplinary, departmental, and campus activities. The difficulty in fulfilling these demands is intensified when career aspirations must be meshed with intimate relationships, care for children, and leisure and community activities. Working late may mean not spending time with a spouse and children. Volunteering in a community program may mean one less article published.

Thus, the literature indicates that academic multiple role persons are under stress just by having a career in academia, as well as by having to balance their multiple roles. These stresses are consistent with the concepts of role overload and role conflict as proposed by Goode (1960). However, the positive side, if any, of living an academic multiple role lifestyle has not yet been explored in the literature.

Research on Multiple Roles

Empirical research on the effects of multiple role involvement can be grouped into three basic categories.

First, there is a body of literature in which the researchers compare people involved in one specified role with others who are not involved in that role on some index of health or well-being, e.g., employed versus unemployed people. Second, there are studies that relate health or well-being to the sheer number of roles a person occupies. Finally, some researchers have attempted to determine what specific role combinations are most related to health or well-being.

Numerous researchers have investigated the effects of role involvement on various indices of health and well-being. The roles of spouse, worker, and parent have all been investigated. Research has shown that married people have fewer symptoms of stress (Cooke & Rousseau, 1984), have better mental health (Gove, 1972; also see Gove & Hughes, 1979 for a recent review), are less depressed (Radloff, 1975), and enjoy better physical health (Verbrugge, 1983) than unmarried people. Those who work have been found to have similar benefits. Both employed men and women enjoy better physical health in terms of lower rates of acute illness, chronic conditions, restricted activity, physician visits, and psychotropic drug use than nonemployed people (Marcus & Seeman, 1981; Nathanson, 1980; Rice & Cugliani, 1979; Rivkin, 1973; Verbrugge, 1982, 1983; Welch & Booth, 1977; Woods & Hulka, 1979). Employed women have been reported to have better mental health (Welch & Booth, 1977) and are more satisfied (Hall & Gordon, 1973)

than unemployed women. These advantages are even greater for women in occupations with high status (Baruch, Barnett, & Rivers, 1985). However, working women have also been found to experience more role conflict (Hall & Gordon, 1973). Finally, parents generally have been found to have better physical health (Verbrugge, 1983) and fewer symptoms of stress (Cooke & Rousseau, 1984). However, mothers report more role strain (Barnett & Baruch, 1985), and mothers with three or more children have been found to report more symptoms (Woods & Hulka, 1979). Taken together, this literature seems to indicate that people involved in any given role are healthier, physically and mentally, and are more satisfied than those who are not involved in that role. However, at least for women, role involvement also is related to feelings of role strain.

There is a small body of literature that relates the number of roles an individual is involved in with indices of health and well-being. These studies have included symptoms, role overload, role conflict, and life satisfaction as indices of health and well-being.

A few researchers identified positive effects with increased role involvement. Studies have shown higher levels of physical well-being (Verbrugge, 1982) and lower levels of depression (Kandel, Davies, & Raveis, 1985) among women who occupied the three roles of wife, mother, and paid worker compared with women who occupied fewer roles. Thoits (1983), sampling over 1000 men and women, found that number

of roles possessed (including spouse, parent, employee, student, organization member, church member, friend, and neighbor) related to less psychological distress (measured by an index developed by Gurin, Veroff, and Feld, 1960). Spreitzer, Snyder, and Larson (1979) related number of roles to global well-being. Using data from the Annual General Social Survey, they reported a modest positive linear relationship between number of roles enacted and psychological well-being among both men and women. In this study, psychological well-being was operationalized as the response to the question, "Taken all together, how would you say things are these days? Would you say that you are very happy, pretty happy, or not too happy?" Five role spheres were used in the analysis: spouse, parent, worker, friend, and church member. For those who occupied only the work role, 33% of men and 37% of women reported being very happy, whereas 45% of men and 46% of women who occupied all five roles indicated they were very happy. Unfortunately, no tests of significance were performed, and work role was the only role considered in the one-role category.

Some studies have found detrimental effects of multiple role involvement, especially for women. Barnett and Baruch (1985) studied a sample of 238 women. The roles of wife, mother, and worker were examined. Number of roles was found to be related to role overload and role conflict, even after controlling for age, education, and total family income. Woods and Hulka (1979), surveying 259 married women, found a

positive relationship between number of role responsibilities women had and the number of symptom complexes they reported. Possible role responsibilities included being the mother of three or more children, being the mother of a preschool aged child, having an ill child, having an ill husband, and being employed. The authors concluded that this study provides evidence that illness may be a response to the stresses and strains inherent in the performance of many demanding roles.

Taken together, these studies indicate that an increase in the number of roles occupied has both positive effects (decreased psychological distress and increased satisfaction), and, at least for women, negative effects (increased symptoms, role overload, and role conflict). With the exception of Woods and Hulka (1979) who reported increased symptoms in multiple role women, these studies are consistent with the studies that look only at one role. Researchers in both types of studies have found that people who are involved in roles are more satisfied and have fewer physical and psychological symptoms, although they also experience more role strain. Woods and Hulka (1979) are unique in the way they conceptualized roles, and that they focused only on married women.

A few researchers have investigated how specific roles interact to influence health and well-being. As with the previously cited research, multiple role involvement has often been found to relate to positive outcomes. In a study

of 400 men and women, Crosby (1982) noted that multiple role men and women reported greater satisfaction with their jobs, their home lives, and their marriages than either married adults without children, single working adults, or women who were exclusively homemakers and parents. Similarly, Quinn and Staines (1979) found that while multiple role men and women reported some interference between work and family roles, they showed a greater degree of job satisfaction than either single women or married childless women. Verbrugge (1983) reported that employment, marriage, and parenthood are all individually related to good physical health. Of the three roles, employment had the strongest relationship. Furthermore, the effects of each of these roles was additive. People with all three roles had the best health, which was due to the straightforward effects of each role, and not to any special effects of combining roles.

However, as with the previously cited research, multiple role involvement has its negative consequences. Barnett and Baruch (1985), using a sample of 238 women between the ages of 35 and 55, found that having children was related to both role overload and role conflict, whereas neither employment status nor marital status added significantly to either role overload or role conflict. The effect of parenthood remained even when marital status and employment status were controlled. Barnett and Baruch argued that the variance accounted for by number of roles is probably due to involvement in specific roles, especially

the role of mother. However, only the main effect of parenthood affected role strain, with no interactions between roles.

Taking these studies together, there is support for the hypothesis that engaging in multiple roles yields better health plus greater satisfaction with many areas of life. However, there is also evidence that multiple role involvement leads to greater role strain. There is some evidence that roles may not interact, but that the effects of role involvement are simply additive. Once again, those with role involvement seem to experience both positive effects, such as better physical health and higher levels of satisfaction, and detrimental effects, such as role overload and role conflict.

Stress Models

The term stress antedates its systematic or scientific use (Lazarus & Folkman, 1984). It was used as early as the fourteenth century to mean hardship, straits, adversity, or affliction. In the late seventeenth century, Hooke (cited in Hinkle, 1973) used stress in the context of the physical sciences. Stress then meant the ratio of an internal force to the area over which the force acted. Physicians in the nineteenth and twentieth centuries used stress in a slightly different way, hypothesizing that stress could lead to certain physical illnesses. Walter Cannon (1932), who studied the physiology of emotion, considered stress to be a disturbance of homeostasis under conditions of cold, lack of

oxygen, and so forth. Hans Selye (1956) used the term in a very technical sense to mean a set of bodily defenses against any form of noxious stimulus.

Theoretical Models of Stress

Just as there are many definitions of stress, there are many different approaches to understanding stress.

Psychologists have created several theories to try to link environmental phenomena (stressors) with psychological or physical consequences (stress responses). Currently, there are four basic models of stress: response-based, stimulus-based, information processing, and interactional (Feuerstein, Labbe, & Kuczmierczyk, 1986).

The authors of response-based models of stress emphasize the determination of a particular response or pattern of responses that reflects a situation in which the individual is, or has been, under pressure from a disturbing environment. In this model, stress is conceptualized as a dependent variable. Selye's (1956) general adaptation syndrome is an example of the response-based concept of stress. Selye proposed that the stress response could be thought of as a universal pattern of defense responses that serves to protect and preserve the biological integrity of the individual. Thus, stress is the organism's response to the environment. Selye believed that the physiological stress response did not depend on the nature of the stressor nor on the species in which it was evoked.

Stimulus-based models are based on engineering principles. Stress is defined in terms of the stimulus characteristics of the environment that are disruptive to the individual. For example, in engineering, an architect is concerned with how much stress a steel beam can withstand without breaking. The engineering analogy suggests that just as physical systems have a limit to the amount of stress they can handle, people also have some built-in resistance to stress, up to a point. When stress becomes intolerable, permanent damage, whether physiological or psychological, may result. Thus, stress is conceptualized in terms of the environment. In this model, stress is identified as the independent variable. The major task for proponents of this model is to delineate the characteristics of stressful situations. Holmes and Rahe (1967) have been doing just that by attempting to identify stressful situations or life events and to determine the impact of these life events on the individual.

Both the response-based and the stimulus-based models of stress are limited because they focus only on one aspect of the stress experience, either the stimulus or the response. Researchers using the response-based model assume that any stimulus which produces the stress response must be viewed as a stressor. Thus, some activities and phenomena which are not generally considered stressors, such as exercise, emotions, and fatigue, would be labeled as such. Furthermore, no straightforward relationship between the

various components of the stress response across all individuals and situations has been defined (McGrath, 1970). The stimulus-based model has its major weaknesses in its failure to identify what is stressful about particular real-life situations and to explain individual differences (Cox, 1978). Two more recent models overcome some of these problems. They are the information processing model and the interactional model.

Proponents of the information processing model emphasize that both stressors and the stress responses cannot be recognized without an interpretation of the stimuli as stressful. Thus, cognitive appraisal and attention are emphasized in this approach. The individual's interpretation of stress requires selective attention, as well as decisions on which stimuli to process and which to ignore. According to this model, there are three general types of stressors: (a) anticipation of physical pain or danger, (b) situations that threaten social isolation or rejection, and (c) stimulus complexity involving either concurrent response demands or novelty and complexity (Hamilton, 1980). The greater the number of stressors appraised by the individual, the greater the strain on the system, and the greater the informational load on an individual's cognitive and biological processes. According to Hamilton (1980), this model is still very new and little research has been done to verify it.

Proponents of the interactional model propose that stress occurs through a particular relationship between the person and the environment. The individual is thought of as an active agent in the stress process who can regulate cognitive, behavioral, and emotional coping strategies which will influence the impact of the stressor. One version of the interactional model is the transactional model as proposed by Lazarus and Folkman (1984).

Briefly, Lazarus and Folkman (1984) propose a cognitive theory of psychological stress in which the person and the environment are viewed as being dynamic and mutually reciprocal. Stress is conceptualized as a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and as endangering well-being. The authors identify two processes, cognitive appraisal and use of coping strategies, as critical mediators of stressful person-environment relationships and their immediate and long-term outcomes. Cognitive appraisal is the process through which the person evaluates whether a particular encounter with the environment is relevant to his or her well-being and, if so, in what way. Lazarus and Folkman propose two kinds of appraisal: primary and secondary. Primary appraisal involves the individual's determination of the situation as positive, irrelevant, or stressful. During this process the individual appraises the level of demand of the situation (Cox, 1978). Thus, demand is based on the person's

perception of the environment. Demand may be external, coming from the environment (such as a work deadline), or internal, including psychological and physiological needs and expectations, such as the expectation that one can do everything well. In secondary appraisal, the individual assesses the resources available and what can be done about the situation.

Numerous factors influence the appraisal process, including factors relating to the situation, to the person, and to the coping strategies available (Lazarus & Folkman, 1984). Factors relating to the situation that affect appraisal include its novelty, predictability, timing, and ambiguity. Factors relating to the person, such as his or her beliefs about personal control and expectations of efficacy and outcome affect the appraisal process. Factors relating to coping strategies available to the person include problem solving skills, social skills, social support, and material resources. These factors all interact to influence how the individual appraises the situation and his or her ability to deal with it. The person's appraisal then influences the coping strategies tried. The individual continually reappraises the situation and possibilities as new information from the environment and from the person's own reactions are received. How the person copes is thought to have short-term and long-term consequences in terms of social functioning, morale and well-being, and somatic health.

The interactional model, as opposed to the stimulus-based and response-based models, has the strength of not focusing on either just the stressor or the stress response. Instead, it focuses on the interaction between the person and the environment. Furthermore, it allows for individual differences through the inclusion of the appraisal component and the inclusion of perceptions of demands and resources. The authors also propose mediating factors that help explain why all people under stress do not experience ill effects. Finally, the authors consider positive outcomes such as morale and well-being, rather than focusing only on negative outcomes. Thus, the interactional model seemed best suited to use to aid in exploring the complex process of the relationship between stress and outcomes.

Assessment of Stress

How stress is assessed depends on the model being used. In general, stress can be conceptualized as stimulus events, as in the stimulus-based model, or as a reaction pattern, as in the response-based model. The former concept is often labeled the stressor, while the latter is the stress response (Feuerstein et al., 1986).

Stressors represent stimulus events that require some form of adaptation or adjustment. Stressors can be external physical stimuli, such as loud noises, or interpersonal difficulties, or internal stimuli, such as physical pain or cognitions. Stressors vary considerably across individuals,

as well as across time and situations for the same individual. Several research teams have worked to identify and formulate a way to measure stressors that are common to most people. The Social Readjustment Rating Scale developed by Holmes and Rahe (1967) is one of the most frequently used measure of stressors. This instrument focuses on major events that disrupt life such as the death of a relative. A more recent conceptualization of stressors can be seen in the work by Lazarus and his colleagues (Kanner, Coyne, Schaefer, & Lazarus, 1981) on daily hassles and uplifts, which focuses on the level of irritating, frustrating, distressing demands, and the positive experiences and joys that characterize everyday transactions with the environment.

The stress response is a complex reaction pattern that often has physiological, cognitive, and behavioral components (Feuerstein et al., 1986). The physiological component of the stress response involves activation of the autonomic nervous system. The cognitive component of the stress response includes fluctuation in mood, difficulty in concentrating, vigor, fatigue, and coping efforts. The behavioral component represents overt responses such as violence, hostility, avoidance, or withdrawal. One of the most famous descriptions of the stress response was presented by Selye (1956), who documented enlargement and dark discoloration of the adrenal glands; intense shrinkage of the thymus, spleen, and lymph nodes; and deep bleeding

ulcers of the stomach and upper gut in experimental animals. Other physiological responses which may be measured include heart rate, blood pressure, and hormone levels. Behavioral responses are often measured objectively by performance-based methods. Self-report measures are probably the most frequently used method of measuring the stress response in humans (Baum, Grunberg, & Singer, 1982), and can be used to assess all three components. Numerous self-report instruments measure physical outcomes, such as the Seriousness of Illness Survey (Wyler, Masuda, & Holmes, 1968). One measure, the Strain Questionnaire (Lefebvre & Sandford, 1985) assesses all three dimensions using a self-report format.

Conclusion

Currently, there are four major models of stress. One, the interactional model, seems best suited to guide research on the effects of the multiple role lifestyle on individual's levels of stress and satisfaction and to propose possible mediating factors.

Satisfaction

As with stress, there is no single meaning for the term satisfaction. Furthermore, satisfaction is often used interchangeably with similar terms such as happiness, quality of life, and adjustment. According to Campbell, Converse, and Rodgers (1976), satisfaction implies a cognitive judgment of a current situation laid against external standards of comparison such as "other people I

know" or more private levels of aspiration. This may be compared to happiness, which seems to evoke chiefly an absolutely emotional state (Campbell et al., 1976). Quality of life is different still in that it is usually measured by some objective standard, such as ownership of luxury items, and thus assumes that people who have a high quality of life are satisfied. Finally, the term adjustment is often used similarly to satisfaction, especially in the area of marriage, even though adjustment refers more to congruence between partners in expectations, performances, and values (Rhyne, 1981). This study was focused only on satisfaction.

Theories of Satisfaction

There are several theoretical explanations of satisfaction. These include Maslow's (1954) need hierarchy, the two-factor theory as proposed by Herzberg (1966), theories that compare expectations and performance, and finally, theories based on rewards.

Maslow (1954) asserted that man has five different classes of needs, and that these are arranged on a hierarchy of prepotency. The less potent do not come to govern behavior until the more potent are fulfilled. The five classes of needs are physiological needs; safety needs; needs relating to belonging, friendship and love; esteem needs; and the need for self-actualization. The assumption is that the higher one gets in the hierarchy, the more satisfied one is. Unfortunately, acceptance of the theory is largely an act of faith, for little research has been carried out to verify it (Cox, 1978).

Herzberg (1966) proposed the two-factor, or motivation-hygiene, theory to describe work satisfaction. He argued that satisfaction depends on motivator factors, whereas dissatisfaction relates to hygiene factors. Good hygiene, such as better working conditions and more pay are theorized to decrease dissatisfaction, but do not promote satisfaction. Motivator factors such as achievement, recognition, responsibility, and advancement will increase satisfaction. Unfortunately, many studies have failed to support this theory (Cox, 1978).

Locke, Cartledge, and Knerr (1970) proposed that satisfaction is a function of the degree to which one's performance achieves one's desired goal or is discrepant from one's value standard, with the former resulting in higher satisfaction and the latter in lower satisfaction. Linsenmeier and Brickman (1980) proposed a similar idea. They suggested that satisfaction is based, at least in part, on the goals or expectations of the individual. They added that, although performing well is generally more satisfying than performing badly, the lower the expectations, the more satisfied the person will be. They suggested, in short, that people will be satisfied with themselves and what they accomplish to the extent that their accomplishment exceeds what they had expected to achieve and disappointed if it falls short of what they had expected. Thus, people who underestimate themselves are apt to be continually surprised by success, whereas those who overestimate themselves are

apt to be just as often surprised by failure. In effect, satisfaction depends on expectations regarding performance outcomes as well as the performance outcome itself. Thus, using this theoretical framework, assessing satisfaction would require knowing both the individual's expectations of, as well as the outcome of, a performance. This model is slightly difficult to use in the study of role satisfaction because of the emphasis on achievement and performance, which implies a specific event or group of events. Roles are made up of many different activities, or events, and assessing all of them could be overwhelming.

Vroom (1964) defined satisfaction as the affective orientation on the part of the individual towards the roles he or she is presently occupying, and it is a function of the attainment of rewards. Thus, the more rewards a role offers, the more satisfied a person will be with it. This is consistent with the theory proposed by Sieber (1974), stating that multiple role involvement may offer the individual many rewards and thus may be satisfying to the person.

Role Satisfaction

The theory and research in the area of satisfaction has generally focused on satisfaction within a role. Such areas as job satisfaction and marital satisfaction are common in the literature. Thus, each role has its own specific theories and assessment techniques. However, there is a tremendous amount of overlap among roles in how satisfaction is conceptualized.

Campbell et al. (1976) have presented one theory of work satisfaction. They proposed that job satisfaction is based on how the person perceives his or her job situation. This is based, in part, on objective characteristics of the job, and on characteristics of the respondent which determine how the person perceives the characteristics of the job. Thus, one approach to assessing job satisfaction is to solicit the individual's assessment of the attributes of his or her job. Attributes that have been found to be important are comfort, challenge, pay, coworker relations, and resources (Campbell et al., 1976). A different approach to assessing job satisfaction is to focus on the individuals' assessments of the fit between career and abilities and interests and the degree to which they feel successful. This approach has been taken by Osherson and Dill (1983).

A similar theory can be applied to other roles. Marital satisfaction, too, has been thought of in terms of the objective characteristics of the marriage. Specific characteristics of a marriage include levels of love and affection; amount of arguing, friendship, communication; and sexual gratification (Rhyne, 1981). For parenthood, such characteristics might include children's affection towards parents and vice versa, level of parental respect from children, and level of sensitivity of parents (Marini, 1980). Leisure activity characteristics include psychological, educational, physiological, and social

stimulation; level of relaxation; and aesthetic enjoyment (Beard & Ragheb, 1980). Satisfaction in each of these roles can also be thought of in terms of personal perception. Indeed, probably the most frequently used type of measure to assess satisfaction in any given role is the one question that generally asks, "how satisfied are you with this role?"

Interrelationships Among Roles

How satisfaction in one role affects satisfaction in other roles has been the topic of some interest and investigation. There are two major theories of how roles relate to one another: the spillover model and the compensatory model (Schmitt & Mellon, 1980). Proponents of the compensatory model suggest that individuals make up for dissatisfaction in one role by having other roles that are interesting or otherwise satisfying. For example, individuals who have routine, boring jobs will seek out challenging and interesting nonwork activities. Hence, the relationship between levels of satisfaction in two roles should be negative. Proponents of the spillover model suggest a positive relationship between roles in that satisfaction in one domain should spill over into other areas.

The most commonly researched interrelationship is between the roles of life in general and work. Researchers have generally found a positive relationship between work satisfaction and satisfaction with life in general (Campbell et al., 1976; Greenhaus, 1974; Hulin, 1969; Iris & Barrett,

1972; Kornhauser, 1965; London, Crandall, & Seals, 1977; Schmitt & Mellon, 1980). Campbell et al. (1976) estimated that 20% of the variance of life satisfaction is shared with work satisfaction and concluded that work satisfaction is one of the most important predictors of life satisfaction. Thus, the research tends to support the spillover model. That is, at least for the roles of work and general life, people who are satisfied with one role are likely to be satisfied with their other roles. However, the relationship is not perfect. Using the estimate of shared variance computed by Campbell et al. (1976), there is still 80% of the variance that is unaccounted for. Thus, it may be wise to study roles separately in order to determine what other factors are related to satisfaction for each life role.

Gender Differences

There is a body of literature that indicates that men and women do not experience the effects of role involvement similarly. According to Barnett and Baruch (1985), women occupy roles that are different from those of men, such as wife and mother, and roles that are labeled the same but may be structured differently, such as the worker role. Theory explaining these differences is available for the roles of worker, spouse, and parent. Empirical evidence to support these theories unfortunately is limited to the spousal role.

Theory

There has been much debate over the effects of working on men and women. Some theorists, such as Long and Porter

(1934), have taken the position that employment is good for men but detrimental for women. They argued that the role of paid worker is necessary and beneficial for men but is an added-on, hazardous role for women. One reason for this is that women typically find themselves in less satisfactory positions than men. Women are discriminated against on the job market and they frequently hold positions that are not commensurate with their educational backgrounds (Epstein, 1970). Taking the opposing viewpoint, other theorists, such as Barnett and Baruch (1985), argued that the role of paid worker is the source of self esteem, purposefulness, and inherent interest that may serve to mitigate any negative effects.

This debate is even more intense when married men and women are the focus. Some theorists support the idea that employment out of the house is detrimental to the well-being of married women, especially mothers, because it places extra burdens on them (Lundberg & Farnham, 1947). Working wives, in addition to their jobs, typically perform most of the household chores, meaning that they put in considerably more hours per day than their husbands. The opposing viewpoint assumes that employment is beneficial to the well-being of married women because women find their family role more frustrating than men do. Most married women probably find housekeeping frustrating and a position of low prestige (Gove, 1972). The housewife must do menial work and is restricted to only one role and source of

gratification (her family). Men, on the other hand, generally occupy at least the two major roles of household head and worker. If a man finds one of these roles unsatisfactory, he can frequently focus his interests on the other role. In contrast, if a women finds her family role unsatisfactory, she typically has no major alternative source of gratification (Gove, 1972). Thus, working would give women another role and another potential source of gratification.

Theory on the differential effects of marriage and parenthood on men and women are less conflicting than that of employment. Marriage and parenthood are generally assumed to have more positive effects on men than on women. When a man gets married, he takes on the role of household head, one of high prestige. When a woman gets married, she takes on the duties of housekeeping, which is often described as menial, low prestige, and frustrating. Similarly, women are typically more involved in the parental role than are their husbands, a role which is generally associated with more obligations than privileges. The woman at home, unlike the man, faces a lack of structure and a lack of legitimization for setting limits on her tasks (Pearlin, 1975). The woman's family roles often combine a high level of psychological demands with a low level of control. For example, a major component of the roles of wife, mother, and homemaker is the obligation to see to it that another person, her spouse or child, is well and happy

and a success at work or school. Yet, in reality, she has relatively little control over the welfare and happiness of another person, and such responsibility thus exposes her to many frustrations and failures (Baruch, Biener, & Barnett, 1987). Overall, women are theorized to find their family roles (marital and parental) more stressful and less satisfying than men.

Research

A number of researchers have compared men and women on the effects of marital role involvement. No empirical studies were found comparing men and women on the effects of employment or parenthood. In general, women are reported to have worse mental health than men (Gove & Tudor, 1973). However, Gove (1972), in an analysis of studies which present the relationship between sex, marital status, and mental illness in industrial societies after World War II, found that this was only true for married men and women. The authors of all of the studies reviewed found that married women have higher rates of mental disorders than married men. However, for the never married, divorced, and widowed, the majority of studies show that men have an equal or greater tendency to become mentally ill compared to women. This holds true for a wide variety of definitions of mental illness from prevalence of neuroses based on community surveys to residency in mental hospitals. Furthermore, Gove (1973) also found that the married state produces greater stress related morbidity (suicides, illness

related to alcohol and tobacco use, and illness requiring prolonged cure) among women than men. Radloff (1975) found that married women are more depressed than married men. Women also report more marital problems and are less happy with their marriages (Gurin et al., 1960).

Thus, theory and research point to differences in the way role involvement affects men and women. Although the theory on the effects of employment is divided, marriage and parenthood are theoretically better for men than for women. Empirical evidence supports the theory that marriage is better for men; married women have higher rates of mental disorders than married men, are less happy with their marriages, and report more marital problems. Overall, theory and research indicate that men and women do not always experience their roles in the same way. Therefore, it is important to consider gender when studying the effects of role involvement on indices of well-being.

Mediators of the Stress-Illness Relationship

A large body of literature has demonstrated that stress plays a precipitating role in the onset of physical and psychological disturbance. It has also become apparent that the relationship between life stress and psychological disturbance, although statistically significant, is relatively small in magnitude (Dohrenwend & Dohrenwend, 1974). Thus, researchers have been searching for factors that may act as mediators or buffers against the adverse effects of life stress. One such factor that has emerged in the literature is the hardy personality.

Hardiness

The research on the hardy personality has focused on how highly stressed individuals who remain healthy differ from those who show illness along with high stress. The proposition of the hardiness studies has been that persons who experience high degrees of stress without falling ill have a personality structure differentiating them from persons who become sick under stress. These hardy persons are considered to possess three general characteristics: (a) the belief that they can control or influence the events of their experience, (b) an ability to feel deeply involved in or committed to the activities of their lives, and (c) the anticipation of change as an exciting challenge to further development (Kobasa, 1979).

Control is one of the three characteristics of the hardy personality. Following the model proposed by Averill (1973), the highly stressed but healthy person is hypothesized to have (a) decisional control, or the capability of autonomously choosing among various courses of action to handle stress; (b) cognitive control, or the ability to interpret, appraise, and incorporate various sorts of stressful events into an ongoing life plan and, thereby, deactivate their jarring effects; and (c) coping skill, or a greater repertory of suitable responses to stress developed through a characteristic motivation to achieve across all situations. In contrast, the highly stressed persons who become ill are powerless, nihilistic,

and low in motivation for achievement. When stress occurs, they are without recourse for its solution, give up what little control they do possess, and succumb to the incapacity of illness (Kobasa, 1979).

The second characteristic of the hardy personality is a feeling of commitment. Committed persons have a belief system that minimizes the perceived threat of any given stressful event. The encounter with a stressful environment is mitigated by a sense of purpose that prevents giving up on one's social context and oneself in times of great pressure. Committed persons feel an involvement with others that serves as a generalized resistance resource against the impact of stress (Antonovsky, 1974). Committed persons have both a reason to and an ability to turn to others for assistance in times demanding readjustment. Furthermore, committed persons have a strong sense of commitment to themselves. An ability to recognize one's distinctive values, goals, and priorities and an appreciation of one's capacity to have purpose and to make decisions support the internal balance and structure that White (1959) deemed essential for the accurate assessment of the threat posed by a particular life situation and for the competent handling of it.

The final component of the hardy personality is an orientation toward challenge. Persons who feel positively about change (i.e., feel challenged) are catalysts in their environment and are well practiced at responding to the

unexpected. Because they value a life filled with interesting experiences, change seekers have well explored their environment and know where to turn for resources to aid them in coping with stress. They have a predisposition to be cognitively flexible, which allows them to integrate and effectively appraise the threat of new situations. Their basic motivation for endurance allows them to persist even when the new information is exceedingly incongruous and, thereby, maximally provoking of strain and illness (Moss, 1973).

Kobasa (1979) published the first study investigating the mediating effects of a hardy personality on the stress-illness relationship. Using a sample of 250 male middle- and upper-level executives of a large public utility company, high stress/high illness and high stress/low illness subsamples were defined. Stress was measured using the Schedule of Recent Life Events and the Social Readjustment Rating Scale (Holmes & Rahe, 1967). Illness was measured by selected items from the Wyler, Masuda, and Holmes (1968) Seriousness of Illness Survey. Hardiness was measured by 15 various scales covering all three components of hardiness. They included the Internal-External Locus of Control Scale (Rotter, Seeman, & Liverant, 1962); nine scales from the Alienation Test, including the Adventurousness versus Responsibility scale; the Powerlessness versus Personal Control scale; the Nihilism versus Meaningfulness scale; the Alienation from Self, Work,

Interpersonal Relationships, Family, and Friends scales; the Vegetative versus Vigorousness scale (Maddi et al., 1979); the Achievement scale; the Need for Cognitive Structure and Need for Endurance scales of the Personality Research Form (Jackson, 1974); and the Preference for Interesting Experiences scale and the Security Orientation scale of the California Life Goals Evaluation Schedule (Hahn, 1966).

The results of this study, using a discriminant analysis procedure, indicated that high stress/low illness subjects scored significantly lower on nihilism, external locus of control, powerlessness, alienation from self, and vegetativeness than did high stress/high illness subjects. These results were enhanced by the fact that various demographic characteristics such as age, education, and socioeconomic level failed to discriminate the two groups. Thus, the results of this study supported the hypothesis that personality may have something to do with staying healthy despite considerable stress and defined five instruments that best differentiated the high stress/high illness and high stress/low illness groups.

Kobasa, Maddi, and Kahn (1982) employed a prospective research design to further test the effects of the hardy personality on the stress-illness link, using a sample of 259 subjects from the same utility company. Stress and illness were measured as in the earlier investigation. Six instruments were used to assess hardiness. They included two tests of commitment, the Alienation from Self and

Alienation from Work scales from the Alienation Test (Maddi et al., 1979); two tests of control, the External Locus of Control Scale (Rotter et al., 1962) and the Powerlessness Scale of the Alienation Test (Maddi et al., 1979); and two tests of challenge, the Security Scale of the California Life Goals Evaluation Schedule (Hahn, 1966) and the Cognitive Structure Scale of the Personality Research Form (Jackson, 1974). Subjects filled out the stress and illness questionnaires once a year for three years. The hardiness questionnaires were completed only in the first year.

As part of their analysis of the data, Kobasa, Maddi, & Kahn (1982) first examined information on the relationships among the six instruments used to measure hardiness. Inspection of the intercorrelation of the six scales prompted the removal of the Cognitive Structure questionnaire from the overall test. This resulted in the final use of five instruments to assess hardiness. Further analyses of the data using an analysis of covariance with prior illness (measured in the first year) as the covariate, illness (measured in the second and third years) as the dependent variable, and hardiness (measured in the first year) and stress (measured in the second and third years) as independent variables indicated that stressful life events were associated with increased illness and that hardiness decreased the likelihood of symptom onset. Furthermore, hardiness interacted with stressful life events, indicating that it is especially important to be hardy if one is experiencing intensely stressful life events.

More recently, studies on hardiness have focused on investigating how other variables such as constitutional disposition, exercise, and social resources interact with hardiness to mediate the stress-illness relationship. Kobasa, Maddi, and Courington (1981), using the same business executive sample and the refined five subtest measure of hardiness, operationalized constitutional predisposition as parent's illness. With prior illness controlled for statistically, stressful life events, hardiness, and constitutional predisposition all had main effects on later illness. Hardiness and constitutional predisposition were not significantly correlated with one another, indicating that they were not just measuring the same construct. The authors conclude that hardiness, constitutional predisposition, and stressful life events have an additive effect with regard to illness, with stressful life events increasing illness and a healthy constitutional predisposition and high hardiness decreasing illness.

Kobasa, Maddi, and Puccetti (1982) investigated the effects of hardiness and exercise as buffers in the stress-illness relationship. Using the same sample and measures, hardiness and exercise were not found to be related to one another, and both were related to illness. Furthermore, both interacted with stressful life events, indicating that they may be most helpful under high stress conditions.

Kobasa and Puccetti (1983) investigated social resources as well as hardiness. Using the same business executive population, they measured social resources on the home and work subscales of the Environment Scale developed by Moos and his colleagues (Moos, 1976; Moos, Insel, & Humphrey, 1974) and by the Social Assets Scale developed by Luborsky, Todd, and Katcher (1973). Along with the main effects of hardiness and stressful life events on illness, boss support interacted with stressful life events in such a way that boss support reduced illness more in high stress executives. Stressful life events, hardiness, and family support interacted such that those who were high in stressful life events, high in perceived family support, and low in hardiness were at highest risk for illness. Social assets was not found to be related to illness.

Other researchers have also included hardiness in their studies. Ganellen and Blaney (1984) investigated the effects of hardiness and social support on illness. The presence of stressful life events was measured by the Life Experiences Survey (Sarason, Johnson, & Siegal, 1978). Illness was measured by the Beck Depression Inventory (Beck, 1967). Hardiness was measured slightly differently from the studies done previously. Ganellen and Blaney (1984) used the Internal subscale of the Levenson Locus of Control Scale (Levenson, 1974) and the Powerlessness, Vegetativeness, Nihilism, Adventurousness, and Alienation from Self subscales of the Alienation Test (Maddi et al., 1979).

Social Support was measured by the Social Perception Questionnaire developed by the authors (Ganellen & Blaney, 1984).

Using a sample of 83 female undergraduates, the results first indicated that the tests measuring commitment and challenge were both strongly associated with social support. In analyzing the relationships among hardiness, social support, stressful life events, and depression, depression was found to be related to stressful life events, social support, and the alienation from self and vegetativeness subscales of hardiness. Only the alienation from self subscale interacted with stressful life events to significantly affect depression.

Ganellen and Blaney (1984) concluded by reiterating the effect of social support on depression, and by questioning how interrelated are the three dimensions of hardiness. It must be noted, however, that Ganellen and Blaney used different instruments to measure life events, illness, and hardiness and a different sample than did Kobasa and her colleagues. Thus, it may not be appropriate to generalize the results obtained by Ganellen and Blaney to the previous work done by Kobasa and her colleagues.

Wiebe and McCallum (1986) tested two stress and illness models that included the mediating effects of health practices and hardiness using a prospective design. Sixty female and 26 male students completed the hardiness test as described by Kobasa (1982). Stress, health practices, and

illness for the prior month were assessed at this time as well as one and two months later. In the first model, illness was measured by the severity of symptoms, whereas in the second model, it was measured by the number of physical symptoms reported.

In both models, path analyses revealed that stress acted directly to affect illness as well as indirectly by changing health practices. Hardiness also had a direct effect on illness as well as an indirect effect through health practices. Hardiness acted independently of stress. The authors concluded that hardiness is related to health status. However, in contrast to its original conception as a stress-resistance resource, this relationship did not appear to arise from its effects on stress. Rather, hardiness had a direct effect on illness as well as an indirect effect through health practices, independent of stress level.

Several differences between this study and prior studies on hardiness may be factors in the contrasting results. First, this study used a shorter time period in its prospective study (three months) than prior prospective studies which used several years. The population in this study also differed from prior studies. The sample included a large number of females, was younger, and was exposed to different types of stressors than in previous studies.

Taking these studies together, there is a growing body of literature showing that personal hardiness has an

important effect upon illness. Furthermore, studies show that hardiness is not a mere reflection of constitutional predisposition, exercise, social resources or various demographic characteristics such as age, education, income, or job level. Hardiness has been shown to have a direct effect on illness. Several studies indicated that hardiness also interacts with stressful life events so as to have the greatest impact during periods of high stress. However, this interaction has not been replicated by other researchers. Overall, hardiness has shown itself to be an important variable to include when trying to explain the relationship between stress and illness.

Social Support

The view that social bonds and supportive interactions are important to a person's health and well-being is not new. The concept of social support has been variously addressed in terms of social bonds (Henderson, 1977, 1980), social networks (Mueller, 1980), meaningful social contact (Cassel, 1976), availability of confidants (Brown, Bhrolchain, & Harris, 1975), human companionship (Lynch, 1977), and social support (Cobb, 1976; Dean & Lin, 1977). Although these concepts are not identical, they share a focus upon the relevance and significance of human relationships (Turner, 1983).

Empirical evidence. The view that social bonds and supportive interactions are important to a person's health and well-being is not new. Support for the proposition that

social support is a significant factor in the buffering or ameliorating of the effects of stress can be found in the areas of animal studies, studies focusing on physical disorders, and studies focusing on psychological distress and disorders.

Bell, LeRoy, and Stephenson (1982), in their review of the literature on animal studies, state that some of the most persuasive evidence for the power of social support factors in influencing the individual's susceptibility to illness comes from animal studies. Under conditions of laboratory-induced stress, the presence of littermates or of other animals who were not strangers, or of the mother, or of affection provided by humans, reduced or eliminated such illnesses as gastric ulcer formation in rats (Conger, Sawrey, & Turrell, 1958), hypertension in mice (Henry & Cassel, 1969), experimental neurosis in a goat (Liddell, 1950), and arteriosclerotic heart disease in rabbits (Nerem, Levesque, & Cornhill, 1980).

Studies on mortality rates in humans have provided evidence for the effects of social support on illness. There is a large body of literature demonstrating the association between marital status and mortality rates. In the 1950s, Kraus and Lillienfeld (1959) concluded from existing medical evidence that married people experienced a lower mortality rate from all causes than did single persons, the widowed, and the divorced for every specific age group in each sex and race. This relationship has been

replicated more recently by Berkman and Syme (1979), who also found significant relationships between mortality and contacts with close friends and relatives, church membership, and group associations.

Numerous studies have shown links between social support and physical disease. A detailed consideration of the significance of personal relationships for heart disease was presented by Lynch (1977). Employing diverse forms of evidence to argue that social isolation impacts dramatically on the occurrence of heart disease, he reviewed studies on differences of rates of heart disease by marital status and by degree of social integration, studies on the presence of others in life threatening situations, and studies on the sudden-death syndrome. Based on this collective evidence, he concluded that human companionship is associated with lower rates of all types of coronary disease.

Social support has also been found to interact with life stress to reduce the negative impact of stress on physical health. Nuckolls, Cassel, and Kaplan (1972) found that pregnant women with high life-change scores and high social support scores had only one-third the complication rate of woman with high life-change scores and low social support scores. Gore (1978) reported that, among a sample of men whose jobs had been abolished, those with high levels of social support were protected against certain physical difficulties such as arthritis.

Social support does not only have effects on mortality and physical disease. There is an abundance of literature documenting the effects of social support on psychological distress and disorder. Lack of social support has been related to depression, general mental health, neurosis, and psychosis. Brown et al. (1975) examined the influence of a close, confiding relationship in reducing the risk of depression following a major life event or long-term difficulty. Among those women who lacked a confiding relationship, 38% developed depression compared to only 4% of women with such a confiding relationship. This relationship was also demonstrated by Lowenthal and Haven (1968) using an aged population and Miller and Ingram (1976) using health-center clientele. Dean and Lin and their associates (Dean & Lin, 1977; Dean, Lin, Tausig, & Ensel, 1980; Lin, Simeone, Ensel, & Kuo, 1979) observed a significant relationship between psychological distress and social support as measured in terms of its instrumental and expressive dimensions. Henderson, Byrne, and Duncan-Jones (1981) found a relationship between perceived adequacy of relationships and subsequent neuroses. Mueller (1980), in a review of a broad array of studies, found support for a relationship between mental health status and the characteristics of one's social network.

Taken together, these studies, focusing on a wide variety of measures of health and well-being and using a variety of approaches to measure social support in both

animals and humans, provide substantial evidence that social support indeed has an effect on physical and psychological health. The next question that researchers have addressed is how social support works.

How social support works. There are two theoretical arguments on how social support acts to affect physical and psychological symptomology. The first hypothesis, often labeled the direct effect or main effect hypothesis, suggests that social support has a direct effect on such symptoms. A number of researchers report finding primarily main effects (Andrews, Tennant, Hewson, & Vaillant, 1978; Bell et al., 1982; Williams, Ware, & Donald, 1981). According to this hypothesis, social support influences symptoms directly, regardless of the level of stress. In the second hypothesis, often called the buffering or interaction effect hypothesis, social support operates in an interactive fashion with level of stress to modify the effects of stress on health outcomes. Substantial evidence consistent with the buffering hypothesis can be assembled (Brown et al., 1975; Cobb, 1976; Dean & Lin, 1977; Nuckolls et al., 1972). Under this hypothesis, social support is thought to be more effective in reducing distress under high stress circumstances than under low stress circumstances. Thus, social support is thought to be most effective when the person needs it most.

According to Turner (1983) and Williams et al. (1981), it is not clear from the available literature whether social

support benefits mental health only in a direct manner, or interacts to modify the effects of stressful events when they occur and thus serves a protective function. Turner (1983) concluded that progress in resolving this issue will require that future research consider the possibility of subgroup variation, consider circumstances that might obscure buffering effects, and address the issue of temporal priority of social support.

Approaches to measuring social support. A variety of approaches have been used to estimate social support, each of which have proven useful on predicting mortality and both psychiatric and psychological morbidity. According to Turner (1983), there are three basic approaches: the social-integration approach, the social-network analysis, and the social-psychological or perceptual approach.

The social-integration approach assesses support in terms of the individual's connections with others, including primary and secondary relationships and both formal and informal group associations. This approach assumes that some quantity of support is available from social connections. Some researchers have simply used marital status as an index (Eaton, 1978; Gore, 1978). Others have used a more complex analysis of marital status, contacts with close friends and relatives, church membership, and so forth (Berkman & Syme, 1979). The major weakness of this approach is the assumption that social relationships are equivalent to supportive relationships. Although it seems

reasonable that individuals with social relationships will, on the average, have higher social support, this will not always be the case, as in the example of a bitter marriage that may be less supportive than no relationship at all (Turner, 1983).

Social-network analysis, rather than defining social support simply in terms of the quantity and/or quality of social contact, attempts a more complex and comprehensive analysis of the social environment. Social network characteristics that have been suggested by Walker, MacBride, & Vachon (1977) as being most relevant to personal support are (a) size: the number of persons with whom the individual maintains social contact; (b) strength of ties: the level of intimacy, time, and intensity involved in the tie; (c) density: the extent to which network members know and contact one another independent of the individual; (d) homogeneity of membership: the social and demographic similarity of network members; and (e) dispersion of membership: the ease with which network members can get together. This approach, according to Gottlieb (1981), can provide the most complete and unconfounded data on the capacity or potential of the social environment for radiating supportive functions to its members. However, this approach falls short of providing a wholly adequate assessment of social support. As Pearlin, Lieberman, Menaghan, and Mullan (1981) have noted, being embedded on a network is only the first step toward having support; the

final step depends on the quality of the relations one is able to find within the network.

The social-psychological, or perceptual, approach focuses on the experience of being supported by others. This focus is expressed in such terms as emotional support, experienced support, attachment, need satisfaction, and satisfaction with one's relationships. One example of this approach is the conceptualization proposed by Cobb (1976). According to Cobb (1976), social support can be thought of as (a) information leading the person to believe that he or she is cared for and loved, (b) information leading the person to believe that he or she is esteemed and valued, and (c) information leading the person to believe that he or she belongs to a network of communication and mutual obligation. A similar conceptualization, proposed by Weiss (1974), combines both the network and perceptual approaches to social support. Weiss (1974) defined six categories of provisions of social relationships, including (a) a sense of attachment or belonging most often provided by marriage or other cross-sex relationships; (b) social integration, provided by a network of friends and colleagues who offer companionship and opportunity to share interests and values; (c) an opportunity for nurturing others, most often children, which provides a sense of being needed; (d) the reassurance of worth, provided by family, friends, and colleagues who attest to an individual's competence in a given role; (e) a sense of reliable alliance, provided

primarily by kin relationships; and (f) the opportunity for obtaining guidance from trustworthy and supportive friends and relatives. This conceptualization combines both objective information about the person's social environment, such as the availability of friends and opportunities for guidance and for nurturing others, and information about how the person construes his or her social environment, in the form of a sense of attachment and reliable alliances and the reassurance of worth.

Conclusion. It is clear that social support means many things to many people, with both theoretical conceptualizations and measurements varying substantially. However, even with this diversity, social support consistently has been shown to be connected with mortality and with diverse forms of physical morbidity and psychological distress and disorder. However, despite this clarity of evidence, it is still not apparent how social support acts to influence health and well-being. However it does work, it seems that individuals such as multiple role persons would benefit from social support, and thus it should be included when trying to explain the relationship between stress and outcomes.

Coping

Many investigators of the stress-illness relationship have speculated that the way in which people handle stressful life circumstances may be an important set of moderators of this relationship. Increasing emphasis has

been placed on the individual's attempts to utilize personal and social resources to manage stress reactions and to take specific actions to modify the problematic aspects of the environment. This has led to the collection of a diverse set of cognitions and behaviors that have been labeled coping (Billings & Moos, 1981).

Like the concept of stress, coping has been used as an umbrella term encompassing a wide range of variables. The concept of coping has been separated into three broad categories: coping resources, coping styles, and coping efforts (Menaghan, 1983). Coping resources are generalized attitudes and skills that are considered advantageous across many situations; they include attitudes about the self (esteem, ego strength), attitudes about the world (sense of coherence, belief in mastery), intellectual skills (cognitive flexibility and complexity, analytic skills, knowledge), and interpersonal skills (communication skills, competence and ease in interpersonal interaction). Coping styles are generalized coping strategies, defined as typical, habitual preferences for ways of approaching problems. They include, for example, a tendency to withdraw from rather than move toward people, to deny rather than ruminate over difficulty, to be active rather than reactive, or to blame others rather than oneself. Such coping style typologies, by definition, assume some cross-situational, relatively stable problem-solving tendencies in the individual. Coping efforts are specific actions (overt or

covert) taken in specific situations that are intended to reduce a given problem or stress (e.g., appraise the problem, express or inhibit emotions, begin a new activity, ask for help, or refuse to think about it). This study was focused on coping efforts as a potential mediator of the stress-outcome relationship.

Coping strategies. The diversity of coping efforts available to the individual is enormous. However, researchers have been interested in classifying coping strategies into a small number of categories so that they may relate them to their effectiveness in reducing stress reactions. Several such typologies of coping strategies have been proposed.

Hall (1972) classified coping strategies into two broad categories: problem-focused and emotion-focused. Problem-focused coping was broken down further into three categories based on the three levels of role processes described by Levinson (1959), namely structural role redefinition, personal role redefinition, and increased (or reactive) role behavior. Emotion-focused coping has two sub-categories: cognitive restructuring and tension reduction. Structural role redefinition typically involves negotiations with others as a way to alter structurally given demands. Personal role redefinition involves changes in one's definition of important life roles. Individuals using increased role behavior as a strategy strive to meet existing role demands by working harder or more efficiently

and planning their time more carefully. Cognitive restructuring refers to changes in attitudes which modify the meaning of the conflict situation for the individual, whereas tension reduction refers to overt behaviors aimed at reducing stress.

Billings and Moos (1981) focused on the cognitive and behavioral reactions individuals report in response to stressful events. They divided the active methods used to cope into cognitive and behavioral strategies, while separately clustering responses which attempt to avoid the problem or reduce the emotional tension associated with the stressor. Active-cognitive coping includes attempts to manage one's appraisal of the stressfulness of the event. Active-behavioral coping refers to overt behavioral attempts to deal directly with the problem and its effects. Avoidance coping refers to attempts to avoid actively confronting the problem or to indirectly reduce emotional tension by such behavior as eating or smoking more. Billings and Moos (1981) have created a 19-item questionnaire used to assess the use of these three coping strategies in a particular situation.

According to Lazarus and Folkman (1984), most conceptualizations of coping have a shared distinction between coping that is directed at managing or altering the problem causing the distress and coping that is directed at regulating emotional response to the problem. The former is referred to as problem-focused coping, while the latter is

called emotion-focused coping. Problem-focused efforts are often directed at defining the problem, generating alternative solutions, weighting the alternatives in terms of their costs and benefits, choosing among them, and acting. Emotion-focused coping strategies include processes directed at lessening emotional distress, such as avoidance, minimization, distancing, selective attention, and positive comparison and processes such as cognitive reappraisals. In general, emotion-focused forms of coping are more likely to occur when there has been an appraisal that nothing can be done to modify harmful, threatening, or challenging environmental conditions. Problem-focused coping, on the other hand, is more probable when such conditions are appraised as amenable to change (Lazarus & Folkman, 1984). Lazarus and Folkman (1984) have developed a 68-item Ways of Coping checklist to assess how individuals cope with a specific crisis or stressful event. Furthermore, they have collaborated with other researchers such as Billings and Moos (1981) to identify how to code their questionnaires into the emotion-focused and problem-focused categories.

A completely different way of categorizing coping mechanisms was presented by Matheny, Aycock, Pugh, Curlette, and Cannella (1986). Based on a literature review of coping behaviors and coping effectiveness, the authors presented a comprehensive model of stress coping which divides coping behaviors into the general categories of preventative and combative strategies. Preventative strategies include

avoiding stressors through life adjustments, adjusting demand levels, altering stress-induced behavior patterns, and developing coping resources. Combative coping includes five classes of strategies: stress monitoring, marshalling resources, attacking stressors, tolerating stressors, and lowering arousal.

Coping effectiveness. There have been a number of researchers who have explored the effectiveness of specific coping strategies on outcomes such as distress, physical symptoms, depression, and satisfaction. These studies have used a variety of conceptualizations of coping strategies, such as those proposed by Hall (1982), Billings and Moos (1981), and others.

Matheny et al. (1986) provided the most recent and comprehensive overview of coping effectiveness. Using a meta-analysis approach, the authors summarized 54 experimental and quasi-experimental studies published between 1980 and 1985 which examined the efficacy of treatments designed to improve coping. They found that the most effective preventative strategy was social support, which yielded an effect size (es) of .23 when used alone and .69 when used in combination with other strategies. Several of the combative strategies also proved effective. Stress monitoring, although having a negative effect (-.23 es) when used alone, had a positive effect (.62 es) when used with other strategies. Two strategies that are thought to attack stressors, problem solving and social skills, were both

effective, having effect sizes of .74 (when used with other strategies) and 1.28 (used alone), respectively. Cognitive restructuring, a means of tolerating stressors, was effective, having an effect size of .62 when used alone. Finally, two methods of lowering arousal, relaxation and self medication, produced effect sizes of .62 and .34, respectively, when used alone.

Other studies have focused on providing empirical evidence for other conceptualizations of coping. These include studies using the classifications created by Hall (1972) and Billings and Moos (1981).

Hall (1972) and Harrison and Minor (1978) examined the coping efforts of women in multiple roles. Hall's (1972) conceptualization of coping was used in both studies. Hall (1972) reported that structural role redefinition tended to be associated with higher reported satisfaction with "the way you deal with the roles in your life," and that greater use of reactive role behavior was related to lower satisfaction, especially for women with fewer roles. However, Harrison and Minor (1978) found no association between coping strategies and satisfaction.

Billings and Moos (1981), using their three category measure of coping and a sample of 194 two-parent families, found that indices of coping added significant power to the prediction of stress levels, measured in terms of depression, anxiety, and physical symptoms, after controlling for the effects of life change events.

Avoidance coping was related to higher stress.

Active-cognitive coping was related to lower stress levels for all three measures of stress in women, but only for anxiety in men. Active-behavioral coping was not a significant predictor of stress for women and was related to higher levels of anxiety in men.

Several individual studies have focused on the impact of role-specific coping efforts on emotional distress. Pearlin and Schooler (1978) assessed coping efforts separately for the four major role areas of occupation, economic life, marriage, and parenting. The use of self-reliance and positive comparison strategies in both marriage and parenting were related to lower distress. Coping through selective ignoring increased stress in the areas of marriage and parenting. No coping strategy was found to be effective in reducing strain for the occupational role. Pearlin and Schooler (1973) also found that the sheer number of coping strategies used mediated the effects of stress on strain. As the number of responses that people employed increased, stress became decreasingly likely to be associated with strain for the marital and household economics roles, and to a lesser extent in the parental role.

Menaghan (1983) conducted a series of panel analyses on role-specific coping efforts. She found that, for marital, parental, and occupational roles, the coping strategy of optimistic comparisons was related to lower emotional

distress. Restricting expectations was related to greater distress for all three roles, and direct action was related to greater distress in the parental role.

Conclusion. Coping strategies have been conceptualized in many different ways. Although there is some overlap, it is difficult to come to one conclusion based on the research available. Overall, it seems that coping strategies that focus on altering cognitive appraisals (cognitive restructuring, positive comparisons, optimistic comparisons, active-cognitive strategies) are related to less distress and more satisfaction. Strategies that attack the problem (structural role redefinition, self-reliance, problem solving, etc.) also seem to be effective. Avoiding or ignoring the problem seems to be related to higher distress. The number of strategies used also may be important. There is some indication that combining strategies results in an increase in effectiveness of all the strategies used. There also seems to be some indication that the role sphere in which the coping occurs may be important. This is supported by Lazarus and Folkman (1984), who assert that coping strategies are not inherently good or bad. A strategy that is effective in one situation may not be effective in another. The effectiveness of a coping strategy depends on the extent to which it is appropriate to the demands of the situation.

CHAPTER III

METHODOLOGY

Very little is known about the effects of a multiple role lifestyle on the men and women who engage in it. Theorists have predicted both stresses and satisfactions for these people. This descriptive study was designed to determine the levels of stress and satisfaction felt by these people and determine the relationship of the mediating variables of hardiness, social support, coping style, and gender with their levels of stress and satisfaction.

Discussed in chapter III is the methodology used in this study in order to address these issues. The chapter includes a description of the population and sample, the sampling procedures, the instruments used, the data collection procedures, and the data analysis procedures.

Population

The population of interest was men and women who were simultaneously involved in the multiple life roles of career, spouse, and parent. The population from which the sample for this study was drawn consisted of men and women who held faculty, research scientist, or administrative positions at Texas A&M University, were married and living with their spouse, and had at least one child living in the home.

Texas A&M University (TAMU) is located in eastern central Texas, in the city of College Station. TAMU is a land-grant and sea-grant university, established in 1876. In 1987 it was the second largest university in Texas, with an enrollment of over 36,000 students (Texas A&M University, 1987, pp. 73-75). TAMU had the largest enrollment in the nation in engineering, veterinary medicine, and architecture and the second largest in agriculture. Historically, up until 1963, the institution was a military, all male school, primarily focused on education in military science, engineering, and agriculture. In 1987, these programs were still dominant, although there was a great deal of diversity, including a college of liberal arts and professional schools of medicine and dentistry. The university boasts a faculty of over 2200.

College Station and the adjacent city of Bryan had a combined population of over 110,000 in 1987. The closest metropolitan city is Houston, located 100 miles to the south. The university was the single largest industry in the county, with over 9,000 employees ("Texas A&M," 1986). Agriculture was another of the leading industries, with beef cattle, cotton, sorghum, poultry, dairy, and swine production major enterprises. Large businesses located in the area included manufacturing firms such as Alcoa (aluminum smelting), Alenco (aluminum products), Blue Bell Creameries, and Westinghouse. In 1987 the unemployment rate was 5.6%.

This study drew from a population of 1892 male and 621 female TAMU faculty, research scientists, and administrators who were known to fulfill the career requirements of this study.

Sampling Procedure

The names of possible participants were obtained through a listing furnished by the Office of Planning and Institutional Analysis of Texas A&M University. This list included all faculty, research scientists, and administrators employed at Texas A&M University in December, 1986, and totaled 1892 men and 621 women. A sample of 150 male and 150 female participants were randomly selected using a list of computer generated random numbers. These potential subjects were then assigned a code number to protect their confidentiality.

All selected participants were mailed a letter explaining the study, describing the criteria for inclusion, and inviting their participation. A copy of the letter may be found in Appendix A. Participants were asked to return the letter with their response through campus mail in a pre-addressed envelope provided to them. When potential participants were eliminated from the study because they did not fit the criteria for inclusion or indicated they were not interested in participating, a replacement was obtained by randomly selecting other potential participants from the population using a computer generated list of random numbers. This procedure was repeated until at least 100

males and 100 females who met the inclusion criteria agreed to participate.

Sample

At the end of the sampling procedure, a total of 600 males had been sampled and all 621 females were sampled. Five of the men's and 24 of the women's letters were returned indicating the individual had left the university. A total of 359 of the males and 433 of the females responded to the initial inquiry. Of these, 159 men and 282 women reported that they were not married and/or did not have children. This left 200 men and 151 women who potentially fit the criteria. Of these, 112 men and 127 women agreed to participate in the study, and 102 men and 111 women returned a correctly completed questionnaire, forming the research sample.

The mean age of the male participants was 42.4 (SD=6.6), with ages ranging from 30 to 61. Female participants averaged 37.5 years of age (SD=6.2), with a range of 25 to 51. Men had a mean number of 1.9 children living at home (SD=.94), with 77% having just one or two children. Women had an average of 1.6 children living at home (SD=.63), with 94% having two or fewer children at home. The sample was predominately caucasian (95%), with the remaining 5% comprised of blacks (1%), Hispanics (2%), and Asians (2%).

The majority (77%) of the sample held faculty positions, 20.7% held administrative positions, and 2.3%

were research scientists. As shown in Table 1, men were much more likely to hold higher academic rank than women. However, only female administrators were represented in the final sample.

Table 1
Proportional Distribution of Job Titles for Academic
Multiple Role Persons by Gender

| Title | Males | | Females | |
|--------------------|----------|------|----------|------|
| | <u>n</u> | % | <u>n</u> | % |
| Professor | 39 | 38.2 | 2 | 1.8 |
| Assoc. professor | 33 | 32.4 | 7 | 6.3 |
| Asst. professor | 29 | 28.4 | 25 | 22.5 |
| Lecturer | 0 | 0.0 | 29 | 26.1 |
| Research scientist | 1 | 1.0 | 4 | 3.6 |
| Admininstrator | 0 | 0.0 | 44 | 39.6 |

For the faculty members, the mean number of years at TAMU for men and women were 8.86 and 4.65, respectively, and the average number of years teaching in their fields were 12.94 and 6.46, respectively. About two-thirds (65.7%) of the men were tenured, while only 15.4% of the women were tenured. Men tended to be found in the departments of agriculture (22.6%) and engineering (15.7%), whereas women were most likely to be in liberal arts (22.2%) and education (12.7%).

Instruments

The subjects were asked to fill out paper-and-pencil self-report questionnaires which consisted of a total of 207 items covering demographic information; stress level; satisfaction in career, marriage, parenthood, leisure, and life in general; hardiness; social support; and coping strategies. The questionnaires assessing stress level and hardiness are copyrighted and are available from their authors. A copy of all other questionnaires can be found in Appendix B.

Demographic Information

Several demographic items were included in the questionnaire. Information on subjects' gender, marital status, number of children living in the home, and whether they perceived their jobs as careers was requested.

Stress

The Strain Questionnaire (SQ) (Lefebvre & Sandford, 1985) was used to measure stress. The SQ is a 48-item self-report paper-and-pencil test in which stress is conceptualized as a syndrome of physical, behavioral, and cognitive symptoms that are elicited, to varying degrees, by environmental demands upon the individual. This syndrome is relatively independent of concomitant emotional states (e.g., anxiety or depression) and is not severe or chronic enough to have resulted in clinical diagnoses. The respondents were instructed to rate how often in the last week they experienced each of the 48 symptoms by responding

"never," "once or twice," "three or four times," "five or six times," or "every day." Responses were assigned numerical equivalents (1-5) and summed to obtain a total score and scores on each of the subscales.

The SQ is composed of three subscales (physical, behavioral, and cognitive) plus the full-scale score. Twenty-eight questions address physical signs of strain, such as backaches and insomnia, 12 questions cover the behavioral symptoms, such as spending more time alone and being accident prone, and the final eight questions assess cognitive symptoms such as believing the world is against you.

There have been initial reliability and validity studies of this instrument. Tests of reliability have been reported by Lefebvre and Sandford (1985) based on a total sample of 412 subjects, including male and female insurance agents, elementary and secondary school teachers, graduate business students, naval engineers, and undergraduate students. These tests include internal consistency (Cronbach's alpha) and test-retest over a period of one month. The full scale had an alpha coefficient of .94 and a test-retest correlation of .79. Alpha coefficients were reported to be .71 for the behavioral subscale, .86 for the cognitive subscale, and .92 for the physical subscale. Test-retest reliabilities included .73 for the cognitive subscale, .75 for the physical subscale, and .77 for the behavioral subscale (Lefebvre & Sandford, 1985).

Concurrent validity was established using a sample of 68 business students (Lefebvre & Sandford, 1985). Correlations between the SQ, its three subscales, and the Beck Depression Inventory (BDI) were all significant, ranging from .63 to .78. These data indicate a moderate degree of shared variance by the two instruments which is primarily attributable to the overlap of cognitive symptoms. Discriminant validity was established by comparing subgroups of the sample who were considered to be under somewhat stressful conditions with subgroups that were not when they completed the SQ. For the SQ and the cognitive and behavioral subscales, the nonstressed group scored significantly lower than any of the other subgroups. On the physical subscale, the nonstressed group and one of the stressed groups both scored significantly lower than the remaining three stressed groups.

While still being researched, the SQ is one of the few brief, self-report instruments available to measure stress which has empirical evidence of being reliable and valid. It takes into account more than just the physical symptoms of stress by including behavioral and cognitive items. Furthermore, it is designed for use with non-clinical populations.

Satisfaction

Five different facets of satisfaction were assessed using five separate instruments, each designed to measure satisfaction in one area of life. The five areas include

general life satisfaction, career satisfaction, marital satisfaction, parental satisfaction, and leisure satisfaction.

Life satisfaction. The Index of Well-Being, developed by Campbell, Converse, and Rodgers (1976) is a 9-item instrument used to measure life satisfaction. Eight of the items use a semantic differential technique with a 7-point rating scale. Respondents were asked to describe their "present life" by checking a point on the scale between two adjective poles. For example, respondents choose a point between "boring" and "interesting," and between "empty" and "full." The ninth item asked, "How satisfied are you with your life as a whole these days?", and was responded to on a 7-point Likert-type scale. Scores on the Index of Well-Being were calculated by first assigning values (1-7) to the points on each item, with 1 being the least favorable response and 7 the most favorable. Then, the mean of the first eight items was computed. Next, the score on the ninth item was weighed by multiplying it by 1.1. Finally, the total score is computed by adding the mean of the first eight items to the weighted ninth item. Thus, the Index of Well-Being gave considerably more weight to the overall life satisfaction item than to any of the semantic differential items taken alone (Campbell, Converse, & Rodgers, 1976).

Campbell, Converse, & Rodgers (1976), using a national sample of over 2000 people, reported an internal consistency coefficient of .39 for the Index of Well-Being.

Intercorrelations of the first eight items range from .40 to .61. Principal components factor analysis employing varimax rotation of the correlations among the first eight items revealed that they jointly define the first and only factor. Test-retest reliability over a long 8-month period was reported to be .53 (Campbell, Converse, & Rodgers, 1976).

Career satisfaction. Satisfaction with one's career was assessed using a 9-item scale created by Osherson and Dill (1983). These authors based their scale on the work satisfaction questionnaire developed by Campbell, Converse, and Rodgers (1976). Osherson and Dill (1983) proposed that feeling actualized and feeling successful are the two critical components of job satisfaction. Feeling actualized refers to the perceived fit between career and abilities and interests ("I am given a chance to do the things I do best"). Feeling successful is measured by items like "Up to now I've achieved most of my ambitions at work." The scale uses a Likert-type response format, ranging from 1 (very true) to 4 (not at all true). For this study, the response format was changed in order to be consistent with the other instruments used. Several investigators have found that changing the number of response categories does not affect the internal consistency (Bendig, 1954; Komorita, 1963), predictive validity, concurrent validity, or test-retest reliability (Jacoby & Matell, 1971) of the instrument. Items were responded to on a scale of 1 to 5 (agree to disagree), yielding a total score ranging from 9 through 45.

Osherson and Bill (1983) based their instrument on a factor analysis of a set of 23 original items. The nine items used were the ones which loaded most highly onto the first two factors. Unfortunately, no further reliability or validity information is available.

Marital satisfaction. Marital satisfaction was measured using an instrument adapted from the Marital Satisfaction Inventory (MSI) (Roach, Frazier, & Bowden, 1981). The MSI has been reported by Roach, Frazier, and Bowden (1981) to have high internal consistency (Cronbach's alpha ranging from .97 to .98) and test-retest reliability ($r=.76$), as well as concurrent validity with the Marital Adjustment Test (Locke & Wallace, 1959) and discriminant validity with the Marital Problem Checklist (Roach, 1977). The adapted scale contained the 10 items from the MSI which had the highest item-total correlations as reported by Roach, Frazier, & Bowden (1981). Each item was rated on a 1 to 5 Likert-type scale ranging from "Agree" to "Disagree." Total marital satisfaction was computed by summing the item responses (with negatively worded items reversed) for a possible score ranging from 10 through 50.

This 10-item scale has been used in a previous study using a sample of 63 academic multiple role women (Hammond, 1985). Chronbach's alpha coefficient in that study was .92. Item-total correlations ranged from .67 to .96.

Parental satisfaction. Satisfaction in the parental role was measured using a 5-item scale created by Marini

(1980). The scale includes items measuring satisfaction with children's behavior toward the parent ("the affection your children show you") and items measuring satisfaction with the parent's behavior toward the children ("time you spend with your children"). Items are rated on a Likert-type scale ranging from 1 (not at all true) to 4 (very true). For this study, the response categories were changed in order to be consistent with the other instruments. As noted earlier, changing the number of response categories does not affect the internal consistency (Bendig, 1954; Komorita, 1963), test-retest reliability, predictive validity, or concurrent validity (Jacoby & Matell, 1971) of the instrument. Respondents rated their satisfaction in each listed area on a 5-point scale. Responses were summed to get a total score which ranged from a low of 5 to a high of 25.

Using a sample of over 2500 subjects, these five items were found to form the first and only factor in a factor analysis (Marini, 1980). However, no other reliability or validity evidence is available.

Leisure satisfaction. Leisure satisfaction was measured using the psychological subscale of the Leisure Satisfaction Scale (LSS) (Beard & Ragheb, 1980). The LSS is a 51-item questionnaire which covers various aspects of leisure satisfaction. The psychological subscale contains 13 items and indicates the extent to which respondents report receiving psychological benefits such as a sense of

freedom, enjoyment, involvement, and intellectual challenge from their leisure activities. Subjects responded to each item on a 5-point scale ranging from "is almost never true" to "is almost always true." Scores were obtained by summing the item responses (reversing negatively worded items), resulting in a score from 13 through 65.

In one study, Beard and Ragheb (1980) provide information on the reliability of the instrument. Based on a sample of 603 adults, they reported an internal consistency coefficient of .86 for the psychological subscale. Factor analysis using varimax rotation of the entire LSS revealed that the 13 items formed a single factor (Beard & Ragheb, 1980).

Hardiness

The Hardiness Test was used to measure the degree to which the individual has a hardy personality. The hardy personality as conceptualized by Kobasa, Maddi, and Puccetti (1982) is defined as possessing feelings of control, commitment, and challenge. Control concerns the feeling and belief that life events may be influenced by the self rather than feeling helpless when confronted with adversity. Commitment reflects a generalized sense of purpose and meaningfulness that is expressed as a tendency to become actively involved in events rather than remaining passively uninvolved. Challenge suggests that life events are perceived not as an onerous burden one is weighed down by, but instead, as a normal part of life that provides opportunity for development (Ganellen & Blaney, 1984).

Originally, hardiness, being a multifaceted personality style, was measured by five scales combined into a composite score (Kobasa, Maddi, & Kahn, 1982). Commitment was measured by items from the alienation from self and alienation from work scale items of the Alienation Test (Maddi, Kobasa, & Hoover, 1979), employed as a negative indicator. Strong agreement with the alienation from self items indicates a lack of the self-recognition and fundamental sense of purpose associated with the committed person. High scores on the alienation from work scale indicate a lack of personal investment in that area of life involving socially productive occupation, and signal an absence of that engagement and accountability definitive of commitment. An emphasis on challenge was measured negatively by the items from the security scale of the California Life Goals Evaluation Schedule (Hahn, 1966). This true-false scale measures the degree to which safety, stability, and predictability are deemed important. Persons scoring high on this scale are unlikely to perceive changes as stimulating challenges to growth. An attitude of personal control was measured negatively by items from the external locus of control scale (Rotter, Seeman, & Liverant, 1962) and the powerlessness scale of the Alienation Test (Maddi et al., 1979).

The most recent (third generation) Hardiness Test uses 50 items from these five scales to form a composite which has shown moderately high intercorrelations between scales

(ranging from .17 to .74) and jointly defines the first and only large factor in a principle components factor analysis (Kobasa, Maddi, & Puccetti, 1982). In addition, the hardiness composite has shown a stability correlation of .61 over a 5-year period (Kobasa, 1982). The test is scored by the Hardiness Institute, yielding a total hardiness score plus scores for each of the three subscales of commitment, challenge and control.

Coping Strategies

The use of coping strategies was assessed using an instrument developed by Billings and Moos (1981). This instrument is designed to determine how respondents cope with a specific conflict or problem using 19 yes or no items. In this study, subjects were asked to respond to "a typical problem you face because of being married, being a parent, and having a career, all at the same time." The items can be grouped into three method of coping categories: active-cognitive, active-behavioral, and avoidance. Active-cognitive coping includes attempts to manage one's appraisal of the stressfulness of the event, such as "tried to see the positive side of the situation" and "drew on my past experience in similar situations." Active-behavioral coping refers to overt behavioral attempts to deal directly with the problem and its effects, such as "tried to find out more about the situation" and "took some positive action." Avoidance coping refers to attempts to avoid actively confronting the problem (e.g., "prepared for the worst" and

"kept my feelings to myself") or to indirectly reduce emotional tension by such behaviors as eating or smoking more (Billings & Moos, 1981). The items may also be grouped into two focus of coping strategies: problem-focused and emotion-focused. Problem-focused coping includes attempts to modify or eliminate the sources of stress through one's own behavior. Emotion-focused coping includes behavioral or cognitive responses whose primary function is to manage the emotional consequences of stressors and to help maintain one's emotional equilibrium (Billings & Moos, 1981). The score for each coping measure was the percentage of items answered "yes." For example, if the individual responded "yes" to five of the six avoidance coping strategies, the score for avoidance coping would be .83.

Given the underlying assumptions of reliability theory (Guttman, 1945), typical psychometric estimates of internal consistency may have limited applicability in assessing the adequacy of measures of coping (Hartmann, Roper, & Bradford, 1979; Zuckerman, 1979). An upper limit may be placed on internal consistency coefficients by the fact that the use of one coping response may be sufficient to reduce stress and thus lessen the need to use other responses from either the same or other categories of coping. Bearing this in mind, internal consistencies (Cronbach's alpha) of the method of coping categories were .72 for active-cognitive coping, .80 for active-behavioral coping, and .44 for avoidance coping. The intercorrelations among the three

coping categories are relatively low (the average correlation coefficient is .21), indicating that the categories are relatively independent. Adequate internal consistency and independence of the focus of the coping categories have been demonstrated by Folkman and Lazarus (1980).

Social Support

Perceived social support was measured by two scales developed by Procidano and Heller (1983). Perceived social support refers to the impact social networks have on the individual and can be defined as the extent to which an individual believes that his or her needs for support, information, and feedback are fulfilled (Procidano & Heller, 1983). Perceived social support from friends was measured by the first scale (PSS-Fr), and perceived social support from family was measured by the second (PSS-Fa). Each 20-item scale consisted of declarative statements to which the individual answered "yes," "no," or "don't know." For each item, the response indicative of perceived social support was scored as +1, with total scores ranging from 0 through 20. Example items include "My friends give me the moral support I need" and "Most other people are closer to their family than I am."

Studies have been undertaken to demonstrate the reliability and validity of the two scales. On a population of over 200 students, the PSS-Fr and the PSS-Fa proved to be homogenous measures with Cronbach's alpha coefficients of

.86 and .90, respectively. Separate factor analyses with orthogonal factor rotation indicated that each scale was composed of a single factor (Procidano & Heller, 1983).

Construct validity was shown by Procidano and Heller (1983) using the same sample. Both PSS-Fr and PSS-Fa were reported to be negatively related to symptoms as measured by the Langner screening instrument (Langner, 1962). PSS-Fr was positively related to social assets as measured by the California Psychological Inventory (Good Impression, Sociability, and Social Presence scales) (Gough, 1960) and the Dating and Assertion Questionnaire (Levenson & Gottman, 1978). PSS-Fr was found to be negatively related to psychopathology as measured by the psychasthenia and schizophrenia scales of the Short Form MMPI (Faschinghauer, 1974), while the PSS-Fa was negatively related to the depression, psychasthenia, and schizophrenia scales.

Data Collection

Each individual agreeing to participate in the study was sent a packet including a letter which thanked the participant and provided a brief description of the purpose of the study and instructions for participating in the study (Appendix C), the questionnaires (Appendix E), and a pre-addressed envelope for the return of the packet through campus mail. The University of Florida Institutional Review Board and the Texas A&M University Institutional Review Board determined that it was not necessary to obtain informed consent from the subjects. Subjects' names were

not placed on the questionnaire to ensure confidentiality. Each packet was given a code number which was paired with a respondent's name on a separate listing, allowing for follow-up of packets that were not returned while still protecting confidentiality.

If the packet was not returned within two weeks, a follow-up letter was sent to the individual, reminding the participant to return the questionnaire. Data collection ended four weeks after the expected return date of the last questionnaire mailed.

Research Questions

The following research questions were posed:

1. How can multiple role persons be described in terms of
 - a. the level of stress they experience?
 - b. the amount of career, spousal, parental, leisure, and general life satisfaction they experience?
 - c. their hardiness?
 - d. their typical coping strategies?
 - e. their level of social support?
2. Do male and female multiple role persons differ regarding
 - a. the level of stress they experience?
 - b. the amount of career, spousal, parental, leisure, and general life satisfaction they experience?

- c. their hardiness?
- d. their typical coping strategies?
- e. their level of social support?

3. How do gender, hardiness, social support, and typical coping strategies relate to the levels of career satisfaction, marital satisfaction, parental satisfaction, leisure satisfaction, and life satisfaction of multiple role persons?

4. How do gender, hardiness, social support, and typical coping strategies relate to the level of stress in multiple role persons?

Data Analysis

To answer these research questions, the data were coded, entered into a computer, and analyzed using SAS. Descriptive statistics, t tests, and multiple regression analyses were used to analyze the data. Specific data analysis procedures and results are described in Chapter IV.

CHAPTER IV

RESULTS

This study was designed to examine and describe role and life satisfaction and stress in men and women involved in multiple life roles. The second purpose of this study was to explore the mediating effects of coping strategies, hardiness, social support, and gender on these levels of stress and satisfaction. The sample consisted of 102 men and 111 women who held faculty, research scientist or administrative positions at Texas A&M University, were married and living with their spouse, and had at least one child who lived in their home. In this chapter, the results of the study will be presented as they pertain to each of the four research questions posed.

Research Questions

Question One

In the first research question, how multiple role persons could be described in terms of (a) the level of stress they experience; (b) the amount of career, marital, parental, leisure, and general life satisfaction they feel; (c) their hardiness; (d) their typical coping strategies; and (e) their level of social support was addressed. Means and standard deviations were computed for these variables and are presented in Table 2. As can be noted, participants

Table 2

Means and Standard Deviations of Stress, Satisfaction Variables, and Mediating Variables

| Variable | Mean | SD | Possible Range |
|--------------------------|-------|-------|----------------|
| Stress | 64.15 | 11.95 | 48-240 |
| Life satisfaction | 11.67 | 1.93 | 2.1-14.7 |
| Career satisfaction | 35.31 | 5.93 | 9-45 |
| Marital satisfaction | 40.68 | 8.28 | 10-50 |
| Parental satisfaction | 20.17 | 2.85 | 5-25 |
| Leisure satisfaction | 49.21 | 8.30 | 13-65 |
| Hardiness | 76.20 | 7.88 | 0-100 |
| Social support-friends | 12.03 | 5.11 | 0-20 |
| Social support-family | 16.14 | 4.27 | 0-20 |
| Active-cognitive coping | .83 | .17 | 0-1 |
| Active-behavioral coping | .62 | .18 | 0-1 |
| Avoidance coping | .33 | .20 | 0-1 |

reported a mean score of 64.15 on the stress questionnaire, which had a possible range of 48 through 240. This is below the adult norm of 86 (SD=25) reported by the authors of this instrument (Lefebvre & Sandford, 1985). The participants reported a mean general life satisfaction level of 11.67 on a possible scale of 2.1 through 14.7. This is similar to the adult norm of 11.77 (SD=2.2) reported by Campbell, Converse, and Rodgers (1976). On hardiness, they scored an average of 76.2 on a scale of 0 through 100 and a mean percentile rank of 63rd, based on the test's norms. The

participants' mean ratings of the levels of social support they receive from their friends and from family, reported on scales of 0 through 20, were 12.03 and 16.14, respectively. The measure of typical coping strategies yielded three separate, independent scores: one for active-cognitive coping, one for active-behavioral coping, and one for avoidance coping. Several items were provided for each strategy. For each of the three strategies, a score was obtained by dividing the number of the strategy's items to which the participant responded "yes" by the total number of items possible for that strategy. The participants reported using the highest percentage of active-cognitive strategies (.83), followed by active-behavioral (.62) and avoidance strategies (.33).

Question Two

Whether men and women differed on (a) the level of stress they experience; (b) the amount of career, marital, parental, leisure, and general life satisfaction they feel; (c) their hardiness; (d) their typical coping strategies; and (e) their level of social support was addressed in the second research question. Two-tailed t tests were used to test for significant gender differences on these variables. The means and standard deviations for the scores on these variables by gender can be found in Table 3. Men reported significantly lower levels of stress ($t(207)=-2.40$, $p<.05$) and significantly higher levels of career satisfaction ($t(211)=2.96$, $p<.05$) and leisure satisfaction ($t(206)=2.28$,

Table 3

Means and Standard Deviations of Scores on Stress, Satisfaction Variables, and Mediating Variables by Gender

| Variable | <u>Men</u> | | <u>Women</u> | | <u>t</u> |
|--------------------------|------------|------|--------------|------|----------|
| | Mean | SD | Mean | SD | |
| Stress | 62.1 | 12.1 | 66.1 | 11.5 | -2.40* |
| Life satisfaction | 11.8 | 2.0 | 11.6 | 1.9 | .66 |
| Career satisfaction | 36.2 | 5.7 | 34.5 | 6.0 | 2.06* |
| Marital satisfaction | 40.9 | 8.7 | 40.5 | 7.9 | .40 |
| Parental satisfaction | 19.9 | 2.9 | 20.4 | 2.8 | -1.20 |
| Leisure satisfaction | 50.6 | 8.3 | 48.0 | 7.9 | 2.28* |
| Hardiness | 76.4 | 8.4 | 76.0 | 7.5 | .35 |
| Social support-friends | 11.2 | 4.8 | 12.8 | 5.3 | -2.27* |
| Social support-family | 15.9 | 4.3 | 16.4 | 4.2 | -0.78 |
| Active-cognitive coping | .83 | .18 | .83 | .16 | -0.08 |
| Active-behavioral coping | .62 | .18 | .61 | .18 | .14 |
| Avoidance coping | .30 | .20 | .36 | .20 | -2.13* |

* $p < .05$

$p < .05$), with the other forms of satisfaction not varying significantly by gender. Men and women also did not differ significantly on hardiness or on level of social support received from their families, but did differ significantly on level of social support received from friends ($t(211) = -2.27$, $p < .05$), with women scoring higher than men. In the area of coping, women reported using a significantly higher percentage of avoidance strategies than men

($t(210)=-2.13$, $p<.05$), but did not differ significantly from men in either the percentage of active-cognitive or active-behavioral strategies reportedly used.

Question Three

How gender, hardiness, social support, and typical coping strategies relate to the levels of career satisfaction, marital satisfaction, parental satisfaction, leisure satisfaction, and general life satisfaction in multiple role persons was the focus of the third research question. For this question, forward, stepwise multiple regression analyses were used. One regression analysis was used for each of the five types of satisfaction. Each equation had the same six predictor variables: hardiness, active-cognitive coping, active-behavioral coping, avoidance coping, social support from friends, and social support from family.

Males and females were analyzed separately, doubling the number of equations to 10. Separate analyses were used for males and females because men and women were found to differ significantly on two of the measures of satisfaction as well as on several of the predictor variables. Thus, it is likely that gender interacts with these variables. In order to control for this, the data for each gender were analyzed separately. Each forward stepwise multiple regression analysis added to the regression equation the predictor variable that was most significantly related to the independent variable (with any variance shared with

other predictor variables in the equation partialled out) until none of the remaining predictor variables added significantly ($p < .05$) to the regression equation. The resultant equation contained only the predictor variables that significantly entered the regression equation.

Career satisfaction. Career satisfaction, for men, was found to be significantly predicted by two variables, hardiness and active-cognitive coping, as can be seen by examining Table 4. These variables accounted for 20% of the variance in male career satisfaction. Both variables were positively related to career satisfaction. A one point increase in hardiness would bring an expected increase of .27 points of career satisfaction, and an increase from using no active-cognitive coping strategies to using 100% of these strategies would bring an expected increase of 6.07 points of career satisfaction.

Table 4

Stepwise Regression Analysis of the Relationship Between Career Satisfaction and Mediating Variables for Men

| Parameter | Estimate | <u>SE</u> | <u>F</u> | <u>p</u> |
|------------------------------------|----------------------------|-----------|----------|----------|
| Intercept | 10.61 | | | |
| Hardiness | 0.27 | 0.06 | 18.91 | .0001 |
| Active-cognitive coping | 6.07 | 2.95 | 4.24 | .04 |
| <u>F</u> (2,99)=12.51, $p < .0001$ | <u>r</u> ² =.20 | | | |

For women, career satisfaction was significantly predicted by hardiness and social support from friends, together accounting for 11% of the variance in career satisfaction. A summary of the multiple regression analysis is presented in Table 5. Both hardiness and social support from friends were positive indicators, with a one point increase in hardiness and social support from friends expected to increase career satisfaction by .15 and .27 points, respectively.

Table 5

Stepwise Regression Analysis of the Relationship between Career Satisfaction and Mediating Variables for Women

| Parameter | Estimate | <u>SE</u> | <u>F</u> | <u>p</u> |
|---------------------------------------|----------|----------------------------|----------|----------|
| Intercept | 19.56 | | | |
| Social support-friends | 0.27 | 0.11 | 6.59 | .01 |
| Hardiness | 0.15 | 0.08 | 4.07 | .05 |
| <u>F</u> (2,110)=6.76, <u>p</u> <.002 | | <u>r</u> ² =.11 | | |

Marital satisfaction. For men, marital satisfaction was significantly predicted by social support from family and avoidance coping strategies, with the former being a positive indicator and the latter a negative one. Together they accounted for 32% of the variance in marital satisfaction. Table 6 contains a summary of the multiple regression analysis. As can be seen, a one point increase in social support from family would bring an expected

increase of .96 points of marital satisfaction, whereas an increase in the use of avoidance coping strategies from none to 100% would decrease marital satisfaction by 10.19 points.

Table 6

Stepwise Regression Analysis of the Relationship between Marital Satisfaction and Mediating Variables for Men

| Parameter | Estimate | <u>SE</u> | <u>F</u> | <u>p</u> |
|--|----------|----------------------------|----------|----------|
| Intercept | 28.70 | | | |
| Social support-family | 0.96 | 0.17 | 32.03 | .0001 |
| Avoidance coping | -10.19 | 3.64 | 7.82 | .0062 |
| <u>F</u> (2,99)=23.06, <u>p</u> <.0001 | | <u>r</u> ² =.32 | | |

Table 7

Stepwise Regression Analysis for the Relationship Between Marital Satisfaction and Mediating Variables for Women

| Parameter | Estimate | <u>SE</u> | <u>F</u> | <u>p</u> |
|---|----------|----------------------------|----------|----------|
| Intercept | 26.08 | | | |
| Social support-family | 0.88 | 0.16 | 30.88 | .0001 |
| <u>F</u> (1,109)=30.88, <u>p</u> <.0001 | | <u>r</u> ² =.22 | | |

The multiple regression analysis for marital satisfaction in women is presented in Table 7. Only social support from family significantly predicted marital satisfaction in women. However, this variable alone accounted for 22% of the variance in marital satisfaction.

Being a positive predictor, each increase of one point of social support from family would be expected to increase marital satisfaction by .83 points.

Parental satisfaction. The regression analyses on the variable parental satisfaction are located in Table 8 for men and Table 9 for women. Parental satisfaction for men was significantly predicted by three variables: hardiness, social support from family, and active-behavioral coping. These variables together accounted for 35% of the variance in parental satisfaction, and all three were positive indicators.

Table 8
Stepwise Regression Analysis of the Relationship Between
Parental Satisfaction and Mediating Factors in Men

| Parameter | Estimate | <u>SE</u> | <u>F</u> | p |
|--|----------------------------|-----------|----------|-------|
| Intercept | 7.81 | | | |
| Social support-family | 0.28 | 0.06 | 23.86 | .0001 |
| Active-behavioral coping | 3.78 | 1.23 | 8.69 | .004 |
| Hardiness | 0.07 | 0.03 | 5.22 | .02 |
| <u>F</u> (3,98)=17.23, <u>p</u> <.0001 | <u>r</u> ² =.35 | | | |

For women, social support from family and social support from friends were the two significant predictors of parental satisfaction, accounting for 12% of its variance. Both were positive predictors, with social support from family having a larger impact on parental satisfaction than

social support from friends, .17 and .10 points of parental satisfaction for every point of social support from family and friends, respectively.

Table 9

Stepwise Regression Analysis of the Relationship Between Parental Satisfaction and Mediating Variables for Women

| Parameter | Estimate | SE | T | p |
|-------------------------|----------|-----------|------|------|
| Intercept | 16.30 | | | |
| Social support-family | 0.17 | 0.06 | 7.86 | .006 |
| Social support-friends | 0.10 | 0.05 | 4.38 | .04 |
| $F(2,108)=7.29, p<.001$ | | $r^2=.12$ | | |

Leisure satisfaction. Leisure satisfaction was significantly predicted by hardiness and active-behavioral coping strategies for men, as indicated by the regression analysis summarized in Table 10. Together these variables accounted for 23% of the variance in leisure satisfaction for men. The regression analysis for women's leisure satisfaction can be found in Table 11. For women, leisure satisfaction was significantly predicted by three variables: hardiness, social support from family, and social support from friends. These were all positive predictors of leisure satisfaction and together accounted for 20% of the variance in level of satisfaction.

Table 10

Stepwise Regression Analysis of the Relationship Between
Leisure Satisfaction and Mediating Variables for Men

| Parameter | Estimate | <u>SE</u> | <u>F</u> | <u>p</u> |
|--|----------|----------------------------|----------|----------|
| Intercept | 11.72 | | | |
| Hardiness | 0.41 | 0.90 | 20.45 | .0001 |
| Active-behavioral coping | 12.43 | 4.10 | 9.19 | .003 |
| <u>F</u> (2,99)=14.44, <u>p</u> <.0001 | | <u>r</u> ² =.23 | | |

Table 11

Stepwise Regression Analysis of the Relationship Between
Leisure Satisfaction and Mediating Variables for Women

| Parameter | Estimate | <u>SE</u> | <u>F</u> | <u>p</u> |
|--|----------|----------------------------|----------|----------|
| Intercept | 21.99 | | | |
| Social support-friends | 0.42 | 0.13 | 9.87 | .002 |
| Social support-family | 0.38 | 0.17 | 5.27 | .02 |
| Hardiness | 0.19 | 0.09 | 4.03 | .04 |
| <u>F</u> (3,107)=9.05, <u>p</u> <.0001 | | <u>r</u> ² =.20 | | |

General life satisfaction. Finally, general life satisfaction for men was significantly predicted by hardiness, social support from family, and avoidance coping strategies, which together accounted for 29% of the variance in general life satisfaction. A review of Table 12, which contains the regression analysis, reveals that hardiness and social support were positive indicators, whereas avoidance

coping was a negative predictor. Raising hardiness by one point would be expected to raise general life satisfaction by .08 points. Similarly, increasing social support from family by one point would raise the dependent variable by .10 points. Decreasing the use of avoidance coping strategies from 100% to 0% would raise general life satisfaction by 2.00 points. For women, hardiness and social support from family were also significant predictors of general life satisfaction, along with social support from friends. The regression analysis is presented in Table 13. These three positive indicators of general life satisfaction accounted for 34% of its variance. Increasing hardiness, social support from family, and social support from friends by one point each would be expected to increase general life satisfaction by .08, .15, and .07 points, respectively.

Table 12

Stepwise Regression Analysis of the Relationship Between
Life Satisfaction and Mediating Variables for Men

| Parameter | Estimate | <u>SE</u> | <u>F</u> | <u>p</u> |
|--|----------------------------|-----------|----------|----------|
| Intercept | 4.94 | | | |
| Hardiness | 0.08 | 0.02 | 11.41 | .001 |
| Social support-family | 0.10 | 0.04 | 5.97 | .02 |
| Avoidance coping | -2.00 | 0.89 | 5.05 | .03 |
| <u>F</u> (3,98)=13.56, <u>p</u> <.0001 | <u>r</u> ² =.29 | | | |

Table 13

Stepwise Regression Analysis of the Relationship Between
Life Satisfaction and Mediating Variables for Women

| Parameter | Estimate | SE | F | p |
|---------------------------|-----------|------|-------|-------|
| Intercept | 2.24 | | | |
| Social support-family | 0.15 | 0.04 | 18.28 | .0001 |
| Hardiness | 0.08 | 0.02 | 14.33 | .0002 |
| Social support-friends | 0.07 | 0.03 | 6.60 | .01 |
| $F(3,107)=18.43, p<.0001$ | $r^2=.34$ | | | |

Intercorrelations. It must be noted that several of the mediating variables were found to correlate with a type of satisfaction, yet did not enter the regression equation because they also correlated with one or more of the other mediating variables, and thus did not add significant additional predicting power to the equation.

Selected intercorrelations among the satisfaction variables and mediating variables for men are presented in Table 14. For men, hardiness was significantly correlated with social support from family, from friends, and negatively with avoidance coping. Social support from family was correlated with social support from friends, and active-cognitive coping was correlated with active-behavioral coping. These correlation coefficients ranged in magnitude from .21 through .35. Because of these intercorrelations, hardiness was not included in the equation for marital satisfaction for men, even though they

Table 14

Selected Intercorrelations Among Satisfaction Variables and
Mediating Variables for Men

| Variable | 6 | 7 | 8 | 9 | 10 | 11 |
|-----------------------------------|------|------|------|------|------|-------|
| 1. Life satisfaction | .46* | .21* | .37* | .17 | .01 | -.33* |
| 2. Career satisfaction | .41* | .03 | .15 | .22* | -.07 | -.18 |
| 3. Marital satisfaction | .28* | .13 | .51* | -.05 | .02 | -.31* |
| 4. Parental satisfaction | .34* | .27* | .51* | .24* | .25* | -.19 |
| 5. Leisure satisfaction | .39* | .26* | .22* | .20* | .26* | -.12 |
| 6. Hardiness | - | .34* | .35* | .09 | -.03 | -.31* |
| 7. Social support from friends | | - | .21* | .10 | .15 | -.07 |
| 8. Social support from family | | | - | .11 | .04 | -.16 |
| 9. Active-cognitive coping | | | | - | .29* | .02 |
| 10. Active-behavioral coping | | | | | - | .06 |
| 11. Avoidance coping | | | | | | - |

* $p < .05$

were correlated. Social support from friends was omitted from the equations for life, parental, and leisure satisfaction. Social support from family was not included in leisure satisfaction, and active-cognitive coping was left out of parental and leisure satisfaction. The significant ($p < .05$) correlations between role satisfaction and an omitted mediating variable ranged from .20 through .28.

Table 15

Selected Intercorrelations Among Satisfaction Variables and
Mediating Variables for Women

| Variable | 6 | 7 | 8 | 9 | 10 | 11 |
|-----------------------------------|------|------|------|------|------|-------|
| 1. Life satisfaction | .41* | .33* | .42* | .21* | .17 | -.15 |
| 2. Career satisfaction | .24* | .28* | .14 | -.05 | .05 | -.13 |
| 3. Marital satisfaction | .09 | .09 | .47* | .11 | -.01 | -.15 |
| 4. Parental satisfaction | .07 | .23* | .29* | .09 | -.06 | -.02 |
| 5. Leisure satisfaction | .27* | .35* | .27* | .11 | .21* | -.16 |
| 6. Hardiness | - | .22* | .15 | -.07 | .08 | -.28* |
| 7. Social support from friends | | - | .17 | .11 | .47* | -.21* |
| 8. Social support from family | | | - | .24* | -.02 | -.08 |
| 9. Active-cognitive coping | | | | - | .18 | -.05 |
| 10. Active-behavioral coping | | | | | - | -.01 |
| 11. Avoidance coping | | | | | | - |

* $p < .05$

Selected intercorrelations among the satisfaction variables and mediating variables for women are presented in Table 15. For women, coping was not included in two equations for the same reason. Active-cognitive coping was significantly correlated with life satisfaction, and active-behavioral coping was related to leisure satisfaction, with both of these correlation coefficients

being .21. These variables were not included because, in part, for women, active-cognitive coping was correlated with social support from family, active-behavioral coping was related to social support from friends, hardiness was related to social support from friends and negatively to avoidance coping, and social support from friends was related negatively to avoidance coping, with correlation magnitudes ranging from .21 through .47.

Question Four

How gender, hardiness, social support, and typical coping strategies relate to the level of stress in multiple role persons was addressed in research question four. This question was answered using two forward, stepwise multiple regression analyses, one for males and one for females. The data were analyzed separately by gender because men and women were found to differ significantly on stress and several of the predictor variables. The stepwise regression model includes only those variables that significantly ($p < .05$) entered the equation. Stress, a continuous variable, was the dependent variable and hardiness, coping strategies, and social support once again were predictor variables for each equation.

Tables 16 and 17 contain the regression analysis data for men and women, respectively. For men, the multiple regression analysis indicated that two variables, hardiness and avoidance coping, were significant predictors of stress, accounting for 25% of its variance. Hardiness was

negatively related to stress, such that for every increase of one point of hardness there would be a .56 point decrease in stress. Avoidance coping was positively related to stress. Men who used 100% of the avoidance coping strategies would be expected to score 13.45 points higher in stress than men who reported using none of these strategies.

Table 16

Stepwise Regression Analysis of the Relationship Between Stress and Mediating Variables for Men

| Parameter | Estimate | <u>SE</u> | <u>F</u> | <u>p</u> |
|--|----------|----------------------------|----------|----------|
| Intercept | 100.63 | | | |
| Hardiness | -0.56 | 0.13 | 17.65 | .0001 |
| Avoidance coping | 13.45 | 5.53 | 5.92 | .02 |
| <u>F</u> (2,99)=16.45, <u>p</u> <.0001 | | <u>r</u> ² =.25 | | |

Table 17

Stepwise Regression Analysis of the Relationship Between Stress and Mediating Variables for Women

| Parameter | Estimate | <u>SE</u> | <u>F</u> | <u>p</u> |
|---------------------------------------|----------|----------------------------|----------|----------|
| Intercept | 64.34 | | | |
| Avoidance coping | 13.08 | 5.42 | 5.82 | .02 |
| Hardiness | -0.30 | 0.15 | 4.29 | .04 |
| <u>F</u> (2,108)=7.00, <u>p</u> <.001 | | <u>r</u> ² =.11 | | |

Likewise for the women, the same two variables, hardiness and avoidance coping strategies, were found to be significant predictors of stress, (see Table 17). However, these variables accounted for only 11% of the variance in the stress level of the women. Hardiness was negatively related to stress, with a predicted decrease of .30 points of stress for every point of hardiness. Avoidance coping strategies were positively related to stress, with women who used 100% of these strategies predicted to score 13.08 points higher on stress than women who did not use any avoidance coping strategies.

Summary

Overall, the participants in this study reported a mean stress score of 64 and a mean life satisfaction score of 11.67. Mean satisfaction scores for their career, marital, parental, and leisure roles were 35, 41, 20, and 49, respectively. Their hardiness scores averaged 76, placing the sample as a whole in the 63rd percentile of a normative distribution of hardiness in adults. Their perceived social support scores from their families and from their friends averaged 16 and 12, respectively. The sample participants favor using active-cognitive (83%) and active-behavioral (62%) coping strategies more than avoidance coping strategies (33%).

When the multiple role men and women in this study were compared, the men reported significantly lower levels of stress and significantly higher levels of career and leisure

satisfaction. The women indicated significantly higher levels of social support from friends and reported using a significantly higher percentage of avoidance coping strategies. General life satisfaction, marital satisfaction, parental satisfaction, hardiness, social support from family, use of active-cognitive and active-behavioral coping strategies did not differ significantly by gender.

Regression analyses indicated that the various forms of satisfaction experienced by the participants could be predicted by knowledge of the variables of hardiness, social support, and typical coping strategies. The amount of variance in satisfaction levels that could be accounted for ranged from 11% through 35%. Each of these predictor variables was related to at least one form of satisfaction. These analyses also indicated that the significant predictors for each type of satisfaction were different for men and women, indicating that gender is also an important variable. Hardiness was found to be related to career, parental, leisure, and life satisfaction in men and to career, leisure, and life satisfaction in women. Social support from friends was not included in any of the regression equations predicting satisfaction in men, but it was related to career, parental, leisure, and life satisfaction in women. Social support from family was a predictor of marital, parental, and life satisfaction for men and for marital, parental, leisure, and life

satisfaction for women. None of the coping strategies were indicators for women, whereas, for men, active-cognitive coping was related to career and parental satisfaction, active-behavioral coping was related to leisure satisfaction, and avoidance coping was negatively related to marital and life satisfaction.

Finally, in this study hardiness and avoidance coping strategies were the best predictors of stress for both men and women. Regression analyses indicated that hardiness and avoidance coping strategies accounted for 25% of the variance in stress for men and 11% for women. Hardiness was negatively related to stress and use of avoidance coping strategies was positively related to stress for both sexes.

CHAPTER V

DISCUSSION

The purpose of this study was twofold. First, role and life stress and satisfaction in men and women involved in multiple life roles was examined. Second, using an interactional stress model, the mediating effects of hardiness, coping strategies, social support, and gender on role and life satisfaction and stress was addressed. In this chapter, a discussion of the results for each of the research questions, the limitations of the study, and its implications are presented.

Discussion of Results

In the first research question, the levels of stress, life satisfaction, career satisfaction, marital satisfaction, parental satisfaction, leisure satisfaction, hardiness, and social support experienced, as well as typical coping strategies used by multiple role persons were examined. Participants in this study reported fairly low levels of stress. This sample scored almost a full standard deviation below the norm provided by the authors of the instrument used to measure stress. This low score was consistent over all three dimensions (physical, behavioral, and cognitive) measured by the test. This finding is consistent with past empirical research that has shown that

individuals involved in multiple roles have better physical health (Verbrugge, 1983) and less psychological distress (Thoits, 1983) than individuals involved in fewer roles. This result does not lend support to the theory, as proposed by Goode (1960), that involvement in multiple roles produces high levels of role strain and subsequent symptoms of stress. However, since role strain itself was not measured in this study, it is possible that participants may have been experiencing role strain, but, if so, it did not translate into physical, behavioral, or cognitive symptoms of stress.

Participants also reported fairly high levels of satisfaction with their lives, as well as with their individual roles, including the career, marital, parental, and leisure roles. For life satisfaction, their scores were consistent with the norms provided by the authors of the instrument. This finding is also consistent with the limited research which indicates that individuals involved in multiple roles experience a high sense of well-being (Spreitzer, Snyder, & Larson, 1979) and satisfaction (Crosby, 1982). This finding also lends support to theorists who propose that being involved in multiple roles provides more opportunity for satisfaction, such as the theory proposed by Sieber (1974). Although in this study the rewards these multiple role persons perceive were not specifically assessed, according to Sieber (1974) they may gain privileges, personality enrichment, and status security

as a result of occupying multiple roles. It was unexpected, however, that the participants reported high levels of leisure satisfaction. Leisure time is often the lowest priority and the first to be abandoned when things get busy. Indeed, a number of the respondents indicated that they had very little or no leisure time. However, it seems that they endeavor to enjoy what little leisure they have or are satisfied with less.

The participants in this study scored moderately high on hardiness, averaging the 63rd percentile when compared to the norms provided by the instrument's authors. The moderately high scores of this sample may be due, in part, to the high levels of education and socioeconomic status held by the participants in this study. Previous researchers of hardiness (Kobasa, Maddi, & Kahn, 1982; Kobasa & Puccetti, 1983) found no relationship between hardiness and demographic variables such as age, education, and job level. However, these researchers used a sample of male businessmen, thus restricting the range of education and job level.

The participants reported perceiving high levels of social support from their families and moderate levels from their friends. In terms of typical coping strategies used, participants favored active-cognitive strategies, used about two-thirds of the active-behavioral strategies, and only about one-third of the avoidance strategies. This is consistent with a study done by the authors of the

instrument (Billings & Moos, 1981), using a sample of 194 middle-aged couples. They found that respondents reported using about 60% of the active-cognitive and active-behavioral strategies and only 24% of the avoidance strategies.

In summary, the multiple role persons in this study can be described as healthy, with low levels of stress, moderate hardiness, moderate to high levels of social support, predominantly using effective (active-cognitive) coping strategies, and using few ineffective (avoidance) coping strategies. They may also be described as mostly satisfied with their lives and their roles.

In the second research question, differences between men and women on their reported levels of stress; life satisfaction; career, marital, parental, and leisure satisfaction; hardiness; social support; and typical coping strategies were looked at. Men reported significantly lower levels of stress than women. This result is consistent with past research (Gove, 1972) indicating that women, especially married women, have more physical and mental problems than men, and lends support to the notion that multiple roles are more stressful for women than for men. Note, however, that even though the multiple role women in this sample scored higher than the men, the women's level of stress was still low when compared to normative data.

Although no differences were found between the sexes on general life satisfaction, marital satisfaction, or parental

satisfaction, women were significantly less satisfied with their career roles and leisure roles than men. It is not surprising that the women in this sample felt less satisfied with their careers. At least among the faculty members, men held more highly ranked jobs and were more likely to be tenured. Two individual items on the career role satisfaction scale seem to be particularly telling. When asked to rate the item, "If I could begin my career again, I would still be in my present occupation," only 53% of women agreed or strongly agreed, compared to 71% of men. To the item, "The pay is good", 36% of women disagreed or strongly disagreed, compared to 19% of men. These findings tend to support the idea (Epstein, 1970) that women are less satisfied in their careers because they end up in lower positions. However, it is important to note that overall, women's career satisfaction scores were fairly high (3.3 on a 1 through 5 scale), indicating that they did get quite a bit of satisfaction out of their careers, even if it was not as high as men's.

Women also scored significantly lower on leisure satisfaction. Although, unfortunately, the questionnaire did not consider amount of leisure time available (many participants indicated they had none), this finding seems consistent with other researchers who have found that working wives put in considerably more hours per day than their husbands (Pleck, 1979) and thus would have less leisure time and, therefore, less time to enjoy it. Note

again, however, that women still scored fairly high (3.7 out of 5) on leisure satisfaction.

Men and women did not differ significantly on either marital satisfaction or parental satisfaction. This finding is consistent with previous research focusing on physical health as the outcome criterion. Verbrugge (1983) found that men and women benefit to a similar extent from marriage and parenthood when compared to those who do not have those roles. However, this does not support the prevailing idea that marriage and parenthood are less stressful and more satisfying for men. It is proposed that the man's position in these roles is one of power and prestige with little involvement in the menial tasks and frustrations that women are thought to experience in their marital and parental roles (Cove, 1972). It is not clear whether men's levels of marital and parental satisfaction were lower than would be expected given this idea, or women's levels were higher, or both. Perhaps as men become more involved in their family roles, their satisfaction levels approach that of women. Similarly, perhaps as women increase their role involvements to include careers, they find their marital and parental roles less limiting and frustrating when compared to women who occupy only these family roles.

The men and women in this study did not differ on levels of hardiness. Previous studies on hardiness have focused either on men (Kobasa, 1979) or have not reported any information on gender differences. The participants in

this study also did not differ by gender on the levels of social support they perceived from their families. However, women perceived significantly more social support from their friends than men did. No previous research could be located on gender differences in social support. However, women are often expected to achieve and maintain better intimate (and thus supportive) relationships, such as friendships, than men do (Rayfield, Llabre, & Stokes, 1987).

While men and women did not differ on the use of active-cognitive and active-behavioral coping strategies, women did report using significantly more avoidance coping strategies than men. This is partially consistent with the study by Billings and Moos (1981) who found that, in a sample of middle-aged couples, women used significantly more avoidance and active-behavioral strategies than men.

To summarize, several gender differences were found in this study. Multiple role men were found to experience less stress, to have higher career and leisure satisfaction, to perceive less social support from their friends, and to use fewer avoidant coping strategies when compared to multiple role women. Thus, the men tended to be healthier, experiencing less stress and using fewer ineffective methods of coping, and to be more satisfied in their non-family roles than women. Women had the one advantage of perceiving more social support from their friends.

In research question three, how gender, social support, hardiness, and coping strategies relate to the levels of

career, marital, parental, leisure, and general life satisfaction experienced by multiple role persons was explored. The results indicated that, overall, all of these mediating variables were related to at least one type of satisfaction, and all forms of satisfaction were significantly predicted by some combination of the mediating variables. With the exception of life satisfaction, the mediators were more powerful predictors of satisfaction for the men than the women.

Men's life and role satisfaction was generally predicted by a combination of hardiness and coping. Social support from family also entered into the equations for life, marital, and parental satisfaction. Women's marital and parental satisfaction was predicted exclusively by social support, whether from friends or family. Hardiness joined social support in predicting life, career, and leisure satisfaction in women.

Hardiness was a particularly important variable for both men and women, being included in seven of the 10 regression equations. Social support, both from family and friends, was particularly important to the satisfaction level experienced by women, being involved in four of the five regression equations. For men, social support was not as important to their reported satisfaction levels, with social support from family found to be a significant predictor only for life and marital satisfaction and social support from friends not included in any of the men's

equations. Coping strategies was a more powerful predictor for men than for women. One form of coping was included in each of the equations for men, whereas coping did not enter into any of the equations for women. The finding that social support was more important in predicting satisfaction in women and coping strategies was more important in predicting satisfaction in men indicates that gender was another important variable.

It was also noted that several of the mediating variables were found to correlate with a type of satisfaction, yet did not enter the regression equation because they also correlated with one or more of the other mediating variables. For men, social support from both family and friends correlated with four of the five types of satisfaction and, for women, coping strategies was related to two of the five types of satisfaction. This lends even more support to the importance of hardiness, social support, and coping strategies in relation to life and role satisfaction in multiple role persons.

In general, these mediating variables have never been studied in relation to satisfaction before, so these results are unique. Hardiness has never before been related to satisfaction. Similarly, social support and coping have usually been researched with physical and mental illness as the outcome variables. This study provides new evidence that mediators which have typically been thought of in terms of reducing stress also play a role in increasing satisfaction.

In research question four, the relationship between stress and the mediating variables of hardiness, social support, coping strategies, and gender was investigated. Hardiness and avoidance coping were significant predictors of stress for both men and women. None of the other variables were significantly correlated with stress. Hardiness was found to be a negative predictor of stress, which supports the research done by Kobasa and her colleagues (e.g., Kobasa, 1979). Avoidance coping, such as smoking more or keeping one's feelings to oneself, was found to increase stress, whereas the other two forms of coping were not related to stress. This finding is consistent with previous findings by Billings and Moos (1981) in which, using a sample of middle-aged couples, the authors found that avoidance coping was significantly related to depression, anxiety, and physical symptoms and was more highly related to these criteria than the other two methods of coping. However, they also found that active-cognitive coping was negatively related to the three criteria for women, and, for men, anxiety was negatively related to active-cognitive coping and positively related to active-behavioral coping. Social support from neither friends nor family were related to stress. The latter finding is not consistent with the substantial literature that shows that social support has a positive effect on physical and psychological health. This finding is consistent with one study using a sample of 157 lawyers

(Kobasa, 1982). In this study, social support was measured by the number of individuals the participants were able to talk to about the stresses of their work. The author reported that social support was not related to strain as measured by a checklist of 16 symptoms of illness.

Thus, hardiness and low use of avoidance coping were the strongest negative predictors of stress for both men and women, although these variables accounted for less of the variance in stress for women (11%) than for men (25%). An examination of the zero-order correlations of hardiness and avoidance coping with stress for men and women indicated that, while avoidance coping was related to stress to a similar extent for men and women (.34 and .28, respectively), the correlation between hardiness and stress was almost twice the magnitude for men (.45) as for women (.26). It is interesting to note that the creation and refinement of the hardiness instrument was done almost exclusively on a male population (Kobasa, 1979). It is possible that this test or even the concept may not generalize as well to women. Other investigators using women in their sample (Canellen & Blaney, 1984) have also questioned the relationship between hardiness and illness. In a study using female undergraduates, they found that the control dimension of hardiness was not related to illness. Thus, a hardy personality may not be as strong of a mediator of stress for women as for men.

Limitations of the Study

Descriptive studies, including this one, must be interpreted with caution because of the limitations of the sample and the instruments. Although this study used random selection of participants and had a high return rate of completed questionnaires for those who agreed to participate in the study (91% of men and 87% of women), not all potential participants responded to the initial request, and some who responded declined to participate. Thus, a sampling bias due to self selection may be present. Unfortunately, it is not known how many of these people actually fit the criteria for inclusion in the study. Furthermore, this study used participants who held positions at a large, residential university. These results may not generalize to multiple role persons with different careers.

The instruments used in this study also were a possible limitation. Although efforts were made to use instruments for which reliability and validity were previously established, self-report questionnaires are inherently limited by the ability and desire of the participants to answer them truthfully and accurately.

Implications

This study has implications in several areas. There are implications for the status of the literature and for the direction of future research, as well as for the use of a theoretical model of stress in research. This study also has implications for counseling multiple role persons.

This study has replicated many of the results found by previous researchers. Of particular interest, however, are the new findings that mediating variables such as hardiness, social support, coping, and gender, which have typically been studied in terms of their abilities to moderate stress, also work to increase role and life satisfaction in multiple role persons. Further research is clearly needed to help clarify the relationships revealed in this study.

Correlational designs are severely limited in their ability to determine causation. It cannot be concluded from this study that hardiness, social support, or coping strategies reduce stress or increase satisfaction. Thus, experimental studies that systematically vary these mediating variables to determine their impact on stress and satisfaction are needed. Furthermore, although stress and satisfaction were both significantly predicted by the mediating variables, the amount of variance accounted for was never greater than 35%. Although this is not unusual for studies on stress and satisfaction, other contributing variables need to be identified and researched. For example, measures of role strain may be included in future studies. Although participants in this study scored low on stress, it is possible that multiple role persons feel role overload and role conflict and that these would have an impact on the levels of stress and satisfaction multiple role persons experience. Other measures of social support may be needed to demonstrate a link between this variable and stress.

Finally, this study was limited to academic multiple role persons. Further investigations need to be done with multiple role persons in other careers.

This study also has implications for the use of an established interactional model of stress as a framework for viewing how the multiple role lifestyle affects the individual, and for highlighting possible mediators of the stress-outcome relationship. Lazarus and Folkman (1984), the authors of the model used in this study, conceptualize stress as the relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering well-being. Two processes, cognitive appraisal and use of coping strategies, are identified as critical mediators of stressful person-environment relationships and their immediate and long-term consequences. This study has provided support for this model. Hardiness, a type of cognitive appraisal, was clearly shown to be an important mediator for both stress and satisfaction. Coping strategies and social support (often considered a type of coping strategy) were also shown to be related to the levels of stress and/or satisfaction experienced by multiple role persons. Thus, this model was useful as a framework for this study and in guiding future research and should be used instead of the more simplistic and limited stimulus-based and response-based models of stress in research on multiple role persons.

This study has clear implications for counseling multiple role persons. Although the participants reported low levels of stress and moderately high satisfaction, suggesting they may not feel a need for counseling, 17% of the men and 18% of the women indicated that one of the coping strategies they used was to talk to a professional. Thus, professionals need to be aware of ways to help individuals involved in multiple roles. This study provides evidence that hardiness, social support, and coping strategies all are related to the levels of stress and/or satisfaction these people feel. All three of these are related to characteristics or skills that the individual can change. Professionals need to be prepared to help them to do this.

Hardiness is a personality dimension defined by a belief that one can control the events of one's existence, by an ability to feel deeply committed to the activities of one's life, and by the anticipation of change as a challenge rather than a threat. This way of viewing oneself and one's world can be promoted through restructuring the individual's beliefs, just as depression can be treated and a more healthy outlook promoted. Individuals can be helped to find ways to exert control their lives, to find roles that they can commit themselves to, and to take the risks needed for growth.

Similarly, perceived levels of social support can be enhanced through learning to initiate new relationships and

to deepen existing relationships with others who are potential sources of social support. Interpersonal skills such as assertiveness, communication skills, and social skills can be taught.

Finally, maladaptive coping strategies such as the ones clustered under the title of avoidance coping can be replaced with more adaptive ones. Individuals can be helped to reduce their reliance on strategies such as abusing substances (whether food, nicotine, alcohol, or drugs), keeping feelings to oneself, and taking it out on others and to substitute them with more effective strategies such as problem solving, cognitive restructuring, exercising, relaxing, and talking to others.

Summary

Role and life stress and satisfaction in men and women with multiple roles were examined in this study. Using an interactional model of stress as a framework, the mediating effects of hardiness, social support, coping strategies, and gender on role and life satisfaction and stress were explored. The results indicated that participants reported relatively low levels of stress, moderately high levels of all forms of satisfaction, moderate hardiness, high perceived social support from their families, moderate social support from their friends, and a tendency to use active-cognitive and active-behavioral coping strategies and not to use avoidance coping strategies. Men reported significantly lower levels of stress and higher levels of

career satisfaction and leisure satisfaction than women. Women indicated significantly higher levels of perceived social support from their friends and used a higher percentage of avoidance coping strategies than men. Regression analyses showed that the various forms of satisfaction could be significantly predicted by the variables of hardiness, social support, and coping strategies. Significant predictors were different for males and females, indicating gender is also an important variable. Life satisfaction was positively predicted by hardiness and social support from family and negatively predicted by use of avoidance coping strategies for men and by hardiness, social support from family, and social support from friends for women. Stress was significantly related to hardiness and avoidance coping strategies for both sexes.

These results support the use of an interactional theory of stress as a framework for viewing how a multiple role lifestyle affects the individual and for highlighting possible mediators of the stress-outcome relationship, in both counseling and research. Research is now needed to clearly establish a causal relationship between mediating variables and stress and satisfaction, to explore other variables such as role strain, and to replicate these results with multiple role persons in a variety of careers.

APPENDIX A
LETTER OF INTRODUCTION

Dear Faculty or Staff Member,

I would like to request your participation in a research study I am conducting. I am a doctoral student in the Counseling Psychology program at the University of Florida in Gainesville, Florida, and a Counseling Psychology Intern at the Student Counseling Service at Texas A&M University. I am conducting a study on men and women who have both careers and families. The purpose of the study is to describe the level of stress and the level of satisfaction felt by such people, and to determine if social support, coping skills, and having a hardy personality affect the levels of stress and satisfaction experienced.

I am attempting to locate men and women who have careers, are married and presently living with their spouse, and have at least one child who lives in their home.

Participation in this study would involve the completion of a questionnaire which contains about 200 items, and takes about 45 minutes to an hour to complete. The questionnaire will be sent through the mail, and, after it has been filled out, returned to me in a stamped, pre-addressed envelope which I will provide. All responses will be anonymous, with each individual receiving a code number.

I would like to invite you to participate in this study if you are married and presently living with your spouse, and if you have at least one child who lives in your home. To participate, please check the YES box below and return this letter in the enclosed envelope. A questionnaire will be sent to you at your office address. If you are not married or do not have children living with you, or if you do not wish to participate, please check the appropriate NO box and return this letter in the enclosed envelope. Please feel free to call me if you have any questions. My work number is 845-4427.

☐ YES, I would like to participate. I am married and live with my spouse, and I have child(ren) who live in my home.

☐ NO, I am not married and/or don't have children who live with me.

☐ NO, I don't wish to participate.

Thank you for taking the time out of your busy schedule to read and consider this. I am looking forward to hearing from you and hope that you will agree to participate.

Sincerely,

Laura Hammond
Doctoral Candidate

APPENDIX B
INSTRUMENTS

DEMOGRAPHIC INFORMATION

1. Gender: ___ Male ___ Female
2. Are you married and living with your spouse? ___Yes ___No
3. Do you have a career? ___Yes ___No
4. How many children live at home with you? _____

GENERAL LIFE SATISFACTION

Instructions:

Here are some words and phrases which we would like you to use to describe how you feel about your present life. For example, if you think your life is very "boring," put an X in the box right next to the word "boring." If you think it is very "interesting," put an X in the box right next to the word "interesting." If you think it is somewhere in between, put an X where you think it belongs. Put an X in one box on every line.

| | | | | | | | | |
|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------------------|
| Boring | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Interesting |
| Enjoyable | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Miserable |
| Useless | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Worthwhile |
| Friendly | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Lonely |
| Full | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Empty |
| Discouraging | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Hopeful |
| Disappointing | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Rewarding |
| Brings out the best in me | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Doesn't give me much chance |

How satisfied are you with your life as a whole these days?

| | | | | | | | | |
|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|
| Completely Dissatisfied | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Completely Satisfied |
|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|

CAREER ROLE SATISFACTION

Instructions:

Please indicate the extent to which you agree with each of the following statements about your career by circling one of the following alternatives:

- (1) Disagree
- (2) Mostly Disagree
- (3) Neutral
- (4) Mostly Agree
- (5) Agree

- | | |
|---|-----------|
| 1. I have an opportunity to develop my own special abilities. | 1 2 3 4 5 |
| 2. I am given a chance to do the things I do best. | 1 2 3 4 5 |
| 3. My work is interesting. | 1 2 3 4 5 |
| 4. If I could begin my career again, I would still be in my present occupation. | 1 2 3 4 5 |
| 5. My job measures up to the sort of job I wanted when I took it. | 1 2 3 4 5 |
| 6. What happens at work is very important to me. | 1 2 3 4 5 |
| 7. I feel successful at work compared to others of my age and background. | 1 2 3 4 5 |
| 8. The pay is good. | 1 2 3 4 5 |
| 9. Up to now I've achieved most of my ambitions at work. | 1 2 3 4 5 |

MARITAL ROLE SATISFACTION

Instructions:

Please indicate the extent to which you agree with each of the following statements about your marriage by circling one of the following alternatives:

- (1) Disagree
- (2) Mostly Disagree
- (3) Neutral
- (4) Mostly Agree
- (5) Agree

- | | |
|---|-----------|
| 1. I worry a lot about my marriage. | 1 2 3 4 5 |
| 2. I get along well with my spouse. | 1 2 3 4 5 |
| 3. The future of my marriage looks promising to me. | 1 2 3 4 5 |
| 4. I sometimes wish I had not married my present spouse. | 1 2 3 4 5 |
| 5. I am definitely satisfied with my marriage. | 1 2 3 4 5 |
| 6. I feel that I am "in a rut" in my marriage. | 1 2 3 4 5 |
| 7. I get discouraged trying to make my marriage work out. | 1 2 3 4 5 |
| 8. I consider my marital situation to be as pleasant as it should be. | 1 2 3 4 5 |
| 9. I have made a success of my marriage so far. | 1 2 3 4 5 |
| 10. I wish my spouse and I were closer. | 1 2 3 4 5 |

PARENTAL ROLE SATISFACTION

Instructions:

Please indicate the extent to which you are satisfied as a parent with each of the following areas by circling one of the following alternatives:

- (1) Dissatisfied
- (2) Mostly Dissatisfied
- (3) Neutral
- (4) Mostly Satisfied
- (5) Satisfied

- | | | | | | |
|---|---|---|---|---|---|
| 1. Time spent with your children. | 1 | 2 | 3 | 4 | 5 |
| 2. The affection your children show toward you. | 1 | 2 | 3 | 4 | 5 |
| 3. How your children are turning out. | 1 | 2 | 3 | 4 | 5 |
| 4. The respect your children show toward you. | 1 | 2 | 3 | 4 | 5 |
| 5. Your sensitivity to your children's needs. | 1 | 2 | 3 | 4 | 5 |

LEISURE ROLE SATISFACTION

Instructions:

Please read each of the following statements about your leisure activities and indicate how true that statement is for you, choosing from:

- (1) Almost Never
- (2) Seldom
- (3) Sometimes
- (4) Often
- (5) Almost Always

- | | |
|---|-----------|
| 1. I freely choose the activities I do in my leisure time. | 1 2 3 4 5 |
| 2. My leisure activities are very interesting to me. | 1 2 3 4 5 |
| 3. I enjoy doing my leisure activities. | 1 2 3 4 5 |
| 4. I am frustrated in my free time. | 1 2 3 4 5 |
| 5. My leisure activities give me self-confidence. | 1 2 3 4 5 |
| 6. My leisure activities give me a sense of accomplishment. | 1 2 3 4 5 |
| 7. I use many different skills and abilities in my leisure activities. | 1 2 3 4 5 |
| 8. I consider leisure activities a waste of time. | 1 2 3 4 5 |
| 9. When I am doing leisure activities, I become fully involved in the activity. | 1 2 3 4 5 |
| 10. My choices of leisure activities are limited by my lack of skills. | 1 2 3 4 5 |
| 11. I feel lonely in my free time. | 1 2 3 4 5 |
| 12. My leisure activities are intellectually challenging. | 1 2 3 4 5 |
| 13. Generally, my leisure activities have a positive effect upon my life. | 1 2 3 4 5 |

COPING STRATEGIES

Instructions:

Think of a typical problem you have recently faced because of being married, being a parent, and having a career all at the same time. How did you deal with this problem? Please read each statement below and circle "yes" if you did the action described, or "no" if you did not.

- Yes No 1. Tried to see the positive side.
- Yes No 2. Tried to step back from the situation and be more objective.
- Yes No 3. Prayed for guidance or strength.
- Yes No 4. Took things one step at a time.
- Yes No 5. Considered several alternatives for handling the problem.
- Yes No 6. Drew on my past experiences.
- Yes No 7. Tried to find out more about the situation.
- Yes No 8. Talked with a professional person (e.g., doctor, clergy, lawyer) about the situation.
- Yes No 9. Took some positive action.
- Yes No 10. Talked with spouse or other relative about the problem.
- Yes No 11. Talked with friend about the situation.
- Yes No 12. Exercised more.
- Yes No 13. Prepared for the worst.
- Yes No 14. Sometimes took it out on other people when I felt angry or depressed.
- Yes No 15. Tried to reduce the tension by eating more.
- Yes No 16. Tried to reduce the tension by smoking more.
- Yes No 17. Kept my feelings to myself.
- Yes No 18. Got busy with other things in order to keep my mind off the problem.
- Yes No 19. Didn't worry about it; figured everything would probably work out fine.

SOCIAL SUPPORT FROM FRIENDS

Instructions:

The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with friends. For each statement there are three possible answers: Yes, No, and Don't Know. Please circle the answer you choose for each item.

- | | | | |
|-----|----|------------|---|
| Yes | No | Don't Know | 1. My friends give me the moral support I need. |
| Yes | No | Don't Know | 2. Most other people are closer to their friends than I am. |
| Yes | No | Don't Know | 3. My friends enjoy hearing about what I think. |
| Yes | No | Don't Know | 4. Certain friends come to me when they have problems or need advice. |
| Yes | No | Don't Know | 5. I rely on my friends for emotional support. |
| Yes | No | Don't Know | 6. If I felt that one or more of my friends were upset with me, I'd just keep it to myself. |
| Yes | No | Don't Know | 7. I feel that I'm on the fringe in my circle of friends. |
| Yes | No | Don't Know | 8. There is a friend I could go to if I were just feeling down, without feeling funny about it later. |
| Yes | No | Don't Know | 9. My friends and I are very open about what we think about things. |
| Yes | No | Don't Know | 10. My friends are sensitive to my personal needs. |
| Yes | No | Don't Know | 11. My friends come to me for emotional support. |
| Yes | No | Don't Know | 12. My friends are good at helping me solve problems. |
| Yes | No | Don't Know | 13. I have a deep sharing relationship with a number of friends. |
| Yes | No | Don't Know | 14. My friends get good ideas about how to do things or make things from me. |

- Yes No Don't Know 15. When I confide in friends, it makes me feel uncomfortable.
- Yes No Don't Know 16. My friends seek me out for companionship.
- Yes No Don't Know 17. I think that my friends feel that I'm good at helping them solve problems.
- Yes No Don't Know 18. I don't have a relationship with a friend that is as intimate as other people's relationships with friends.
- Yes No Don't Know 19. I've recently gotten a good idea about how to do something from a friend.
- Yes No Don't Know 20. I wish my friends were much different.

SOCIAL SUPPORT FROM FAMILY

Instructions:

The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with their families. For each statement there are three possible answers: Yes, No, and Don't know. Please circle the answer you choose for each item.

- | | | | | | |
|-----|----|-------|------|-----|--|
| Yes | No | Don't | Know | 1. | My family gives me the moral support I need. |
| Yes | No | Don't | Know | 2. | I get good ideas about how to do things or make things from my family. |
| Yes | No | Don't | Know | 3. | Most other people are closer to their family than I am. |
| Yes | No | Don't | Know | 4. | When I confide in the members of my family who are closest to me, I get the idea that it makes them uncomfortable. |
| Yes | No | Don't | Know | 5. | My family enjoys hearing about what I think. |
| Yes | No | Don't | Know | 6. | Members of my family share many of my interests. |
| Yes | No | Don't | Know | 7. | Certain members of my family come to me when they have problems or need advice. |
| Yes | No | Don't | Know | 8. | I rely on my family for emotional support. |
| Yes | No | Don't | Know | 9. | There is a member of my family I could go to if I were just feeling down, without feeling funny about it later. |
| Yes | No | Don't | Know | 10. | My family and I are very open about what we think about things. |
| Yes | No | Don't | Know | 11. | My family is sensitive to my personal needs. |
| Yes | No | Don't | Know | 12. | Members of my family come to me for emotional support. |

- Yes No Don't Know 13. Members of my family are good at helping me solve problems.
- Yes No Don't Know 14. I have a deep sharing relationship with a number of members of my family.
- Yes No Don't Know 15. Members of my family get good ideas about how to do things or make things from me.
- Yes No Don't Know 16. When I confide in members of my family, it makes me uncomfortable.
- Yes No Don't Know 17. Members of my family seek me out for companionship.
- Yes No Don't Know 18. I think that my family feels that I'm good at helping them solve problems.
- Yes No Don't Know 19. I don't have a relationship with a member of my family that is as close as other people's relationships with family members.
- Yes No Don't Know 20. I wish my family were much different.

APPENDIX C
LETTER OF INSTRUCTION

Dear Faculty or Staff Member,

Thank you for agreeing to participate in my study on stress and satisfaction in men and women who have both careers and families. Enclosed you will find a questionnaire and a pre-addressed return envelope. Please complete the entire questionnaire. Notice that most pages are printed on both sides. Please do not collaborate with other people while answering the questionnaire; Answer all of the questions yourself.

When you have finished the questionnaire, return it to me in the enclosed envelope using campus mail. Your prompt response will be appreciated. I will expect to receive your completed questionnaire within two weeks (that is, by _____). Please call me at 845-4427 if you have any questions.

Thank you again for your interest and participation.

Sincerely,

Laura Hammond
Doctoral Candidate

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BIOGRAPHICAL SKETCH

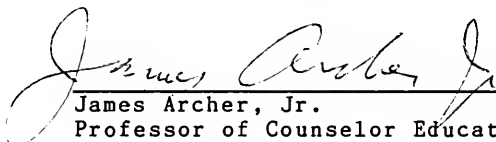
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I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



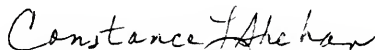
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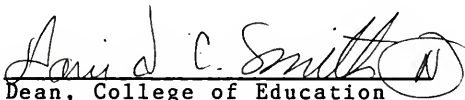
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